The Marine Protected Area

A study of Norway's duties and rights to protect marine biodiversity in marine protected areas

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PART I. INTRODUCTION

1 The Topic

1.1 Introduction

The topic of this thesis is the protection of marine biodiversity by nationally established marine protected areas. The concrete legal investigation I propose to undertake concerns the international duty to establish such areas; the current Norwegian legislation in this regard, and the coastal States right to establish such areas within the jurisdictional regime of UNCLOS. The rationale for the choice of topic is the last decades' increased focus on the marine environment and the importance of its biodiversity, combined with a growing acceptance that a holistic ecosystem approach is important for future sustainability of the marine environment. In Norway, this heightened awareness about the marine environment has materialized in different ways; initializing both non-governmental and governmental initiatives for the conservation of marine biodiversity.

In September 2002 at the Johannesburg World Summit it was realized that the ocean-related objectives of Agenda 21 Chapter 17 were largely unmet,[1] and that the needs addressed by them are becoming critical. A Plan of Action[2] was formulated. The Plan of Action stressed that in order to promote the conservation and management of oceans; actions are needed at all levels to maintain the productivity and biodiversity of important marine and coastal areas, including areas within and beyond national

[1] Agenda 21 paragraph 17.21 provides that "a precautionary anticipatory rather than a reactive approach is necessary to prevent the degradation of the marine environment. Paragraph 17.22 entices the Parties "to prevent, reduce and control degradation of the marine environment so as to maintain and improve its life support and productive capacities."

[2] hereafter: The Plan of Action

jurisdiction. Among the measures identified for achieving these goals were measures to maintain the productivity and biodiversity of important and vulnerable marine and coastal areas, the development and facilitation of new approaches and tools, *inter alia*, establish marine protected areas consistent with international law and based on scientific information.[3] The Plan recommended the Work Program arising from the Jakarta Mandate on the conservation and sustainable use of marine and coastal biodiversity under the auspices of the Convention of Biological Diversity.[4] The Jakarta Mandate[5] emphasizes the importance of the use of the ecosystem approach and the crucial need to establish marine protected areas. The ecosystem approach has gained much support and it has been integrated into many international agreements, as well as in domestic provisions in the later decades.

The aim of this thesis is to investigate the protected area as a measure available for biodiversity conservation and protection. Protected areas may conceivably play a vital role in preserving biodiversity. Without protected areas, it would be difficult to maintain biodiversity at ecosystem, species and genetic levels.[6] The main idea of this thesis is to examine the national marine protected area in an international legal context.

A clarification of the current international framework regarding the duty to protect and conserve marine biodiversity by protected areas is needed. I will examine the coastal State's right to establish marine protected areas under existing legislative regimes at the national, regional and global level. The interface between international and domestic law is interesting due to the comprehensive and binding nature of the United Nations Convention on the Law of the Sea[7], and because of the growing international attention in the importance and conservation of marine biodiversity. The jurisdictional issues that arise when a state establishes a protected area that either infringes or threatens to obstruct the rights bestowed by UNCLOS upon other states, will form a substantial part of the analysis undertaken in this thesis. Conflicts may arise in connection with coastal

[3] WSSD Plan of Action §31.

[4] CBD:COP (1995). Decision II/10.

[5] See p.41.

[6] Jeffery, M. (2003), p.12.

[7] Hereafter: UNCLOS.

state establishment and enforcement of such protected areas. The problems scrutinized will be those related to the question of the coastal States' prescriptive jurisdiction.

The coastal State has two different ways of action when attempting to protect marine biodiversity by protected areas. Either to solve the problem by itself, leaving the international framework for what it is, or it can utilize the existing international legal instruments to the fullest possible extent, while, if necessary, trying to amend the latter in order to create the tools which are considered to be missing.[8] Other States may invoke that there is not legislative jurisdiction and thus hold that the protected areas are non-enforceable. Conflicts may also arise on a more general level; coastal State implementation of a marine protected area without fundamental competence in UNCLOS may be regarded as an unjust attempt by the coastal State to broaden their jurisdiction. The consequence of this is a unilateral alteration of the jurisdictional balance negotiated by UNCLOS III.

The Norwegian Government has appointed an expert group to examine Norwegian legislation with the aim to strengthen and revise legal measures for the protection of biodiversity. Present legislation is considered to not appropriately reflect the inter-dependency of conservation of species and habitats, or the close links between conservation of "man-made" biological diversity and cultural heritage.[9] The Norwegian government has also initiated work on a national marine conservation plan, and has established a group, hereafter called the Advisory Group,[10] to investigate possible attributes of protected areas in Norwegian Seas.[11] The objective is to ensure that a range of representative, singular, vulnerable or threatened underwater types of marine environments and natural assets are preserved for the future to provide, inter alia, reference areas for research and monitoring.[12]

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[8] Franckx, E. (1995). p. 266.

[9] Ministry of the Environment (2001)

[10] Report to the Storting No.43 (1998-99) and Recommendation to the Storting No. 168 (1999-2000).

[11] The Advisory group is established by the Ministry of the environment, together with the Ministry of Fisheries and the Ministry of Petroleum and energy to give advise on the of the first marine conservation plan for marine protected areas in Norway.

[12] Report to the Storting No. 12 (2001-2002).

1.2 Background on marine biodiversity and the present threats

Marine biodiversity is greater than both biodiversity on land and in fresh water. This fact makes the importance of the marine biodiversity for human existence apparent.[13] Research and technical evolution have left us with new knowledge and understanding about the world's seas and oceans. Perhaps most significant is the new scientific knowledge about marine resources, and the inter-locked and interdependent nature of the marine ecosystems. This knowledge has resulted in growing international concern for the condition and future of the marine environment. Today, it is generally accepted, as put by Norse,[14] that the "marine realm provides a great abundance and diversity of food, medicines and raw materials, and will undoubtedly provide important new ones when we learn more". Norse further emphasizes that what today is less accepted is that the wealth of the sea is "finite".[15] The state of the marine environment, and thus the marine biodiversity, is governed by a complex pattern of interaction between a natural interplay and variation in the ecosystems and effects caused by human activity. Impact on just one component may produce consequences in other parts of the ecosystem, even though the actual effects often may be difficult to discern. The consequence of this is for example that if a key species[16] is negatively affected, this can lead to changes in the entire ecosystem.[17] However, there is still a great degree of uncertainty regarding the marine biodiversity and the essential processes in the ecosystems. The great variation in the marine ecosystems entails that much information about the marine processes are still unknown. Furthermore, it is imperative to emphasize the vast knowledge gaps regarding important sea areas, the deep oceans to mention one such still uncharted area. These knowledge deficiencies ought to command States to apply the precautionary approach when dealing with connected environmental issues.

[13] United Nations Atlas of the Oceans.

[14] Norse, E. A. (1993).

[15] Ibid.

[16] A species that many links in the eco-chain depend upon, and Advisory group (2003), p.21.

[17] Report to the Storting No. 12 (2001-2002), and Advisory group (2003), p.21.

In the Advisory Group's review of the natural conditions and values in the Norwegian Sea areas,[18] the marine environment is divided into three spheres; the marine geology and landscape, the physical and chemical conditions and the biological resources. Restrictions soley aimed at conserving landscape or physical and chemical conditions will not be in focus here, but it is important to remember the implications of the ecosystem approach. Further, the report emphasizes that the maintenece of marine biodiversity is generally dependant on four factors; the nature, condition and characteristics of the actual biogeographical region, the number of habitats, sailinity and the stability of the system. This illustrates the complexity and inter-connectedness of marine biodiversity, and also demonstrates that need for multiple and flexible protective measures.

I will in the following give a short introductory to the main characteristics of this biodiversity, and describe which threats are most hazardous. There are predominantly two groups of marine mammals in the Norwegian Sea areas; whales and seals. Sea mammals are to be found along the whole coast, but with a larger variety and density in the more northern parts. Sea mammals are important predators on fish in the Barents Sea, the harp seal population is especially important because of its large number of individuals. Traditionally sea mammals have been subject to industrial catch and represented an important economic resource for the Norwegian coastal societies, but today the market for products deriving from sea mammals is modest. Other than unsustainable catch, the sea mammals are directly threatened by pollution. At the top of the food chain they are also indirectly vulnerable to other threats that negatively affect the lower species in the ecosystem, like fish, invertebrate and marine fauna.

Sea birds are an integrated part of the marine ecosystems, and as the sea mammals they function as indicators for the ecosystem at whole.[19] Sea birds have terrestrial habitat and

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[18] By use of the term "Norwegian sea areas" in this thesis I am referring to sea areas within Norwegian jurisdiction, as defined by UNCLOS. The outermost point for Norway's jurisdiction therefore being 200 miles, art. 57 UNCLOS, from the baseline set in accordance to art. 5 and art. 7 UNCLOS. The exclusive economic zone must be declared by the coastal State. Norway declared its EEZ in 1976 and entered in to force in 1977. More specifically these areas lay in The North Sea, The Norwegian Sea and the Barents Sea. Include the continental shelf beyond the 200 mile zone.

[19] Advisory group (2003), p.21.

constitute the most important connection between marine and terrestrial ecosystems.[20] In Norway, coastal bird life has traditionally been abundant and varied. In the north the bird-mountains, housing thousands, and at Røst, even millions of birds represent a characteristic phenomenon. The sea bird species may be divided into two groups, according to how they feed. One group feeds primarily off invertebrates either on or directly below the surface. The other group dives for their food. Some sea birds dive in shallow waters, catching mussels and the like. Others dive on the high seas for their prey, some as far down as 150 meters. The difference in their feeding routines makes these two groups of sea birds vulnerable to somewhat different environmental hazards; for example the divers will be more susceptible to fishing gear and the surface feeders vulnerable to land based pollution.

The Norwegian Sea areas are nutritious seas well suited to provide vast productivity of many and commercially important fish stocks. The seas function, especially the Barents Sea, as spawning and breeding grounds for several internationally important commercial fish stocks. Norwegian spring spawning herring, Barents Sea capelin and northeast Arctic cod are three of the most important fish stocks in Norwegian waters.[21] The stocks of Norwegian Arctic cod and whiting are outside biological safe limits, while the stocks of Norwegian spring spawning herring are good and continue to grow. The fish stocks are important for Norwegian economy and export, since the fish stocks provide economic benefits of both direct - the possibility for harvesting high quality sea food; and indirectly by ensuring maintained human settlement and employment on the coast. Over-fishing and pollution, as well as climatic changes and physical factors, are the gravest dangers for the fish stocks; but also natural disequilibria in the ecosystem may have serious consequences.

In addition, to the above-mentioned marine biodiversity, the marine realm is also habitat to a multitude of other species. Among these species are a great number of benthic species, invertebrate organisms, plankton and sponges. Sponges are a unique group of aquatic animal; they reside both in shallow waters and depths to 2500 m. In Norway, the Tromsø field (300 m), and the Magnus field (250m) are areas known to be rich in

[20] Sea mammals also function as a connector of the marine and terrestrial ecosystems.

[21] UNEP/GRID-Arendal (2003).

sponges. The sponge fields support a huge amount of diversity, comparable to the diversity found in connection with Lophelia reefs. Due to the sponge's unique body structure, they are sensitive and vulnerable primarily in one aspect: clogging of the fine ostia through which the water is inhaled. This will lead to death and decay, even tough some species have developed defensive strategies. Any persistent construction activity or other activity which may increase the sediment loading of the water will have a major effect on these sponge fields and consequently other animals which rely on them for shelter and support. The species' economic value is of an indirect nature, as the various species contribute to create a functioning ecosystem, i.e. by serving as nutrients for fish stocks. Directly important for Norwegian economy are crusteaceans, mollusks and seaweed.

Cold water corals reefs, Lophelia reefs, are found all along Norway's coastline. The Røst-reef is the worlds largest Lophelia-reef, and is situated by Røst in Lofoten. The Røst-reef is 45 km long and between 2 and 3 km wide.[22] Other reefs of international importance within the Norwegian seas are the Tisler-reef, Sellingrunnen-reef, Iverryggen - and Sula-reef. As opposed to the tropical coral reefs the Lophelia reefs thrive in the dark, and are found at great depths, 200 – 400 meters below sea level. The coral reefs have been built over thousands of years, as the reefs is comprised by skeletons of dead coral; and living coral fasten on this skeleton. These reefs form the infrastructure for an ecosystem where marine life flourishes. The biodiversity associated with Norwegian reefs number at least 600 species including; fish, sponges, invertebrate organisms, plankton and other organisms. For fish, the reefs provide refuge, and the density of some fish species is remarkably high, compared with the density in other ocean areas.[23] The coral reefs have great commercial potential, spanning from the harvesting of connected species, like several commercially important fish types, to exploiting of the biodiversity by bio-prospecting. Living and healthy reefs are viewed to be important bio-banks for future generations. The cold-water coral reefs are very vulnerable to human activity; and are threatened by pollution, sedimentation, climate changes and harmful fishing methods. The biggest threat for the Norwegian coral reefs

[22] Caplex.no (2003)

[23] WWF (2003).

has been identified as the destruction caused by bottom trawling.[24] There is also a growing concern about the effects on the reefs by the hydrocarbon activity; three groups of harmful effects have been stipulated: intoxication, crushing and sedimentation.[25] Having in mind the time used to create the coral reefs, one must appreciate that destruction of coral reefs has irreparable consequences and that the connected loss of biodiversity, will be irreversible.

To examine the closer specifics of marine protected areas, it is imperative to recognize and understand the inherent dangers of the marine area. Only then do the conflicts of conservation regimes and the law of the sea regime appear. Many human activities on the oceans potentially have harmful impact on the marine environment and marine biodiversity. Some impacts occur immediately, while other activities may indirectly influence the biodiversity, i.e. by distorting the ecosystem and hence the equilibrium that secures the biodiversity. The Advisory Group's report includes an analysis of the current and most eminent threats to biodiversity in Norwegian Sea areas; this will be an important source in the following. Since the report is given in connection with the development of a marine protected area program, it also gives an indication of the threats which are deemed to be successfully eliminated or reduced by protected areas. Here, focus will be on the dangers that protected areas might help avoid or diminish.

The Norwegian Sea areas are subject to pollution from operational discharges and accidental spills of oil and chemicals from land based sources, shipping, aqua culture and petroleum exploitation. As industry and technology evolves, the potential pollutants change, representing a constant challenge for environmental protection. The causes of pollution are numerous, and pollution in whatever form may be emitted into the marine environment in varying degrees of intensity. The Advisory Group's report emphasizes that pollution may have quantitative consequences for the biodiversity, when the number of the most vulnerable species is reduced or the species totally disappear.[26] This results in disequilibrium in the ecosystem.

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[24] Ibid.

[25] Ibid.

[26] Advisory group (2003), p.28.

Shipping is generally a safe and environment-friendly form of transportation. But the use of the sea for transportation evidently poses a risk for pollution into the marine environment; by operational discharges, by accidental or intentional pollution, and by emergencies at sea. The pollutants include oil and oily mixtures, noxious liquide substances, sewage, garbadge, noxious solid substances, anti-fouling paints, foreign organisims and noise.[27] Ships may also cause harm to marine habitats or organisms by physical impact, and facilitate the introduction of alien species, these hazards will be investigated below. Operational pollution, is defined as pollution occurred in the ordinary operation of the vessel. Such pollution from the individual vessel is normally not very large, and does alone not pose a great risk to the marine biodiversity. It must be recognized that such pollution, when accumulated, may represent a threat to the biodiversity. Operational pollution may also be detrimental to the biodiversity in a more acute and direct way; i.e. the use of anti-fouling paints to coat the bottoms of ships to prevent sea life such as algae and mollusks from attaching themselves to the hull.[28] Pollution as a result of accidents and emergencies at sea represent a fundamentally different type of vessel pollution. While the effects of operational pollution largely can be monitored and managed, pollution caused by incidents and emergencies at sea are unpredictable and therefore often have catastrophic effects on the marine biodiversity.

Norway's offshore petroleum industry is also a source of pollution. The most hazardous substances during the operational stage are discharged in conjunction with produced water.[29] In addition to the chemicals that have been added, produced water contains a wide range of natural components originating from the deposits. These include waste drilling materials and mud, and may contain naturally occurring radioactive substances, heavy metals and other hazardous substances. A large number of chemicals are used today in connection with petroleum exploitation; approximately 98% of the substances discharged are regarded as non-toxic or only slightly toxic to the environment. Accidental oil spills from offshore operations are often caused by; pipeline breakage, well blowouts, platform fires, overflows and equipment malfunction. The probability for great accidental pollution is considered to be modest. There is also a significant

[27] UN Secretary-General (2003), para. 193.

[28] IMO (2003)

[29] Report to the Storting No. 12 (2001-2002).

amount of natural seepage of petroleum hydrocarbons from submarine oil deposits, which contribute to marine pollution. Unlike the operational sources of pollution, natural oil seepages are very difficult to estimate.

An emerging source of pollution is the aquaculture industry. Indiscriminate use of antibiotics to control diseases and the flight of genetically modified fish from fish farms, represent serious dangers to the natural marine biodiversity. Common for these pollutants is that they spread easily, and therefore represent a danger to biodiversity which is at a different location than the aquaculture site.

Noise pollution is rarely mentioned as a risk to biodiversity, yet it is pervasive throughout the oceans. Seabird researchers have long known that noise from aircraft over-flights can disrupt colonies, causing parents to leave their eggs or chicks, thereby exposing them to the elements and predators. Noise might actually be the greatest instigator of stress for some marine mammal species. Water conducts sound waves thousands of kilometers. Many mammal species have evolved special sensitivities to sound frequencies, like those produced by shipping and underwater construction; a substantial number of species rely on acoustic signals as their primary means of communication.[30]

Unsustainable catch of biological resources represents a serious problem with regard to a sustainable biodiversity. Species holding key functions in the ecosystem are often subject to unsustainable catch, and this has vast consequences for the ecosystem and biodiversity at large. For already endangered species, excessive harvesting is an eminent threat to their existence.[31] In Norway, fish stocks are the biological resource most threatened by over-exploitation. Unsustainable catch of fish-stock will have consequences for the marine ecosystem at large, and also other species will suffer as a result of over-fishing. Moreover, passive fishing techniques, including net and line fishing represent a problem; the by catch issues, unintentional capture of non-sought species, capture fisheries.

[30] Norse, E. A. (1993). p.114.

[31] Report to the Storting. nr. 12 (2001-2002)

Another threat to the biological diversity is represented by the introduction of alien species. Introduction may be intentional such as by the introduction of genetically modified species, or unintentional, i.e. by the outlet of ballast water in a foreign port and generally by tourism and all types of transportation.[32] Harmful aquatic organisms in ballast water represents a great environmental hazard. The IMO estimates that about 10 billion tons of ballast water is transferred globally each year, potentially transferring from one location to another marine species that may prove ecologically harmful when released into a non-native environment.[33] Unlike other forms of marine pollution, such as oil spills, where ameliorative action can be taken and from which the environment will eventually recover, the impacts of invasive marine species are most often irreversible.[34] In addition, the introduction of reared marine species could affect the ecosystem, escapes from aquaculture installations or sea ranches are the major threat. Irreversible effects caused to the marine biodiversity, include alteration the genetic composition of species and the introduction or spreading of diseases. In the Norwegian Sea Area, American lobster and King crab serve as examples of introduced species.

Since biodiversity is adapted to some physical conditions but not others, physical conditions are very important in determining the community of species that live in each ecosystem. Alteration of physical conditions would lead to corresponding changes in the composition and functioning of the biological community. Such alterations may result in the determination of the habitat of marine species by way of altered topography, currents, degree of salience, temperature and the composition of bottom substance. Key issues are changed area use and fragmentation and destruction of natural habitat, which results in involuntary spreading and isolation of certain species. Human activity may alter the physical conditions in many ways; intentionally when the object is to alter the physical environment i.e. clearing of coastal or seabed fauna to accommodate aquaculture, sea-ranching; or unintentionally by trawling, human visits and the construction of harbors and infrastructure, and extraction of gravel and sand.[35]

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[32] St.prp nr 1 2002-2003.

[33] IMO (2003). Alien invaders - graphic.

[34] Globallast (2003).

[35] Rådgivende utvalg for marin verneplan (2003). Section 4.2.1.

Trawling profoundly disturbs the seabed; it destroys the burrows of bottom-dwelling species, mangles huge numbers of non-target species, and increases suspended sediments. Direct effects include damage of target and non-target species due to contact with the trawl and physical alteration to the sea bed. Indirect effects include the re-suspension of sediment particles, toxic chemicals, and nutrients, as well as the discarding of by-catch, which undoubtedly affects food webs.[36] Some deep sea habitats, like deep sea corals, are especially vulnerable to bottom trawling disturbance.[37] The current trend of an increased demand for fishery products combined with the restricted supply of world wide will cause the scale of fishing in deep sea areas to grow in coming years, at the expense of the unique and endemic species inhabiting those areas.[38]

The petroleum activity and mining operations pose physical threats which includes; smothering by spilled oil; fragmentation and loss of wet-lands from pipeline construction; disposal of huge amounts of drilling mud and cuttings; and the effects of channelization, dredging, and filling[39] Petroleum exploitation operations are gradually moving northwards, closer to the cost and vulnerable areas, and the erection of permanent installations in this connection, could harm habitats and coral reefs. In the Norwegian Sea areas the establishment of new energy sources could represent a danger. Wind, wave and tidal power stations could affect the seabed and current conditions.

1.3 Terminology

1.3.1 Biological diversity

Art. 2 of the Biodiversity Convention offers the following definition:

> "Biological diversity" means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

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[36] Norse, E. A. (1993). p. 111.

[37] Warner, R. (2001).

[38] UN Secretary-General (2003) para. 192.

[39] Norse, E. A. (1993). p.110.

The fundamental idea of the biological diversity definition is that the diversity of life occurs at several levels of biological organization. The most widely used definition of biological diversity considers three levels: genetic, species, and ecosystem diversity. The middle level, the species diversity, is the most obvious. A marine ecosystem may be defined as the total sum of marine organisms living in a particular sea area and the interactions between those organisms and the physical environment in which they interact.[40] Ecosystem diversity consists because different physical settings favor very different communities of species. In practice, the physical conditions in ecosystems are so important to the organisms that the concept of a community is not a very useful one unless it is considered in the context of ecosystems. Genetic diversity encompasses the genetic diversity among and within different populations of the same species. In a given population, some individuals possess particular versions of genes that others do not, this genetic diversity provides the raw material for evolution. Populations with higher genetic diversity are more likely to have at least some individuals that can withstand environmental change and pass on their genes.[41]

1.3.2 Marine Protected Area

The protective measure scrutinized in this thesis in regard to protection of marine biodiversity is the marine protected area (hereafter also referred to as a MPA). The term marine protected area is commonly used, but the areas so labeled may have varying degrees of protection ranging from fully protected reserves to areas that permit various user activities.[42] A MPA may be identified as a geographically defined area, which is designed and managed to achieve specific conservation objectives. However, I consider such a broad and all-encompassing understanding of MPA to be too wide-ranging and unmanageable for my purpose. It is essential to limit the scope and to establish the closer contents of the MPA, as it will be understood and utilized in this thesis.

The key element of ecosystem management is to take account of the basic conditions set by the ecosystem itself in order to maintain production and conserve biological

[40] UN Secretary-General (2003), para. 172.

[41] Norse, E. A. (1993). p. 13.

[42] CDB:AHTEG-MCPA (2001).

diversity.[43] The ecosystem approach is one of the main foundations for the increased use of the marine protected area. This is because of its emphasis on the importance of viewing the conservation of biodiversity in connection with surrounding environment and other biodiversity. For example, in the CBD, the ecosystem approach is one of the central elements in complying with the convention.[44] In-situ conservation is defines in art. 2. as:

> "…the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties."

Answers to questions about the size, approach, degree of protection and design of MPAs, and their relationship to other marine and coastal zone management tools, are not clear.[45] Defined broadly, MPAs run the gamut from small, highly protected areas to larger multiple-use areas.[46] No singular approach has emerged as best in every situation; each can make a valuable contribution to the maintenance of biodiversity, depending on the specific ecological and socioeconomic factors in each area.

A useful starting point for investigating the problems outlined above are the international definitions of marine protected areas constructed in light of the biodiversity and ecosystem approach background. As the one suggested by The World Conservation Union's[47] definition of MPA 17th General Assembly in 1988:

> "Any area of inter tidal or sub tidal terrain, together with its overlaying water and associated flora and fauna, historical and cultural features, which has been

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[43] Report to the Storting No. 12 (2001-2002).

[44] The Fifth Conference of Parties to the Convention agreed upon general criteria in regard to ecosystem approach in the Malawi principles, CBD:COP (2000). Decision V/6.

[45] See 2.3.

[46] Norse, E. A. (1993). One example are large marine ecosystem area management where focus is on "a large marine region that has unique physical and biological characteristics and within which organisms have distinctive reproductive, growth and feeding strategies". Another example is integrated area management in which "a specific area is zoned and regulated for a variety of uses, including research, species protection, tourism, or fishing, that is compatible with the management goals of the area".

[47] Hereafter the IUCN.

> reserved by law or other effective measures to protect part or all of the enclosed environment."

This definition is broad, allowing a range of "features" to legitimize the establishment of a MPA. These "features" are of quite disapaouriging nature, and include natural as well as man-made attributes. The IUCN definition includes biodiversity in the phrase "associated flora and fauna". The reason that it doesn't use the term biodiversity may be found in the fact that the term biodiversity gained widespread support first after the 1992 Rio Conference. Furthermore, the definition has inclusive understanding of the marine sphere by defining the geographical scope to include "any area of inter tidal or sub tidal terrain, together with its overlaying water". For the purpose of my investigation related to the protection of biodiversity the inclusive nature on the "features" included in the IUCN definition are too broad. Therefore the only feature examined in relation to MPA will be the biodiversity, or "associated flora and fauna" feature.

In the Biodiversity Convention "protected area" is defined in art. 2:

> "'Protected area' means a geographically defined area which is designated or regulated and managed to achieve specific conservation objectives."

The CBD's general definition of protected area is indeterminate. It produces vagueness and introduces criteria that work against effective management of protected areas and even biodiversity conservation. The definition can be interpreted to consider a site a protected area if it is either designated, or regulated and managed. In this context "designated" doesn't indicate named but legally defined by geographical coordinates. Protected areas are "site specific", i.e. they are sites which are geographically defined. This is in contrast to the legal technique of protection of ecosystem types (e.g. all wetlands), which do not need such designation, and thus may be referred to as non site-specific. If this was the intention of the definition it would produce an unreasonable polarity in the criteria, asking States to either have an area simply called (designated) protected, or requiring an area that has established legal frameworks, finances and

other resources. The former has no apparent meaningful conditions while the latter places heavy burden on the State before establishing protected areas over a site.[48]

Although the definition in art. 2 does not specifically define a marine protected area, it is considered to also apply to marine and coastal areas.[49] The ad hoc Technical Group on Marine and Coastal Protected areas (AHTEG) was established pursuant to programme element 3 of the programme of work on the marine and coastal biological diversity.[50] The work of the Group relates to the operational objectives 3.1 and 3.2 of the programme of work on marine and coastal biological diversity.[51] The Group adopted the following definition, which is based on the IUCN definition,[52] of Marine and Coastal Protected Area (hereafter MPCA[53]):

> "Marine and Coastal Protected Area' means any defined area within or adjacent to the marine environment, together with its overlying waters and associated flora, fauna, and historical and cultural features, which have been reserved by legislation or other effective means, including custom, with the effect that its marine and/or coastal diversity enjoys a higher level of protection than its surroundings"[54] [55]

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[48] Jeffery, M. (2003) p. 11-12.

[49] CDB:AHTEG-MCPA (2001).

[50] CBD:COP (1998). Decision IV/5, annex.

[51] CBD:AHTEG-MCPA (2003) p. 1-2.

[52] Ibid. para. 29.

[53] The AHTEG used the term Marine and Coastal Protected Areas to make it "quite clear that its deliberations apply to coastal areas as well as the sea" Ibid. para. 29.

[54] Ibid. para. 30.

[55] Other definitions of marine protected areas can be found at the FAO and the IMO. FAO offers this definition: "A protected marine intertidal or subtidal area, within territorial waters, EEZs or in the high seas, set aside by law or other effective means, together with its overlying water and associated flora, fauna, historical and cultural features. It provides degrees of preservation and protection for important marine biodiversity and resources; a particular habitat (e.g. a mangrove or a reef) or species, or sub-population (e.g. spawners or juveniles) depending on the degree of use permitted." FAO, Glossary. The IMO "Particularly Sensitive Sea Areas" PSSA is defined as: "an area that needs special protection through action by IMO because of its significance for recognized ecological or socio-economic or scientific reasons and which may be vulnerable to damage by international maritime activities." IMO (2003). Special Areas and Particularly Sensitive Sea Areas.

The Norwegian government employs the following definition for marine protected area:

> "Marine protected areas are areas where the seabed and/or the whole of the appurtenant water column or parts thereof are protected under the terms of the Nature Conservation Act or which have been given specific protection pursuant to other laws. A marine protected area may also comprise a land area in the tidal zone. Marine protected areas covered by the Nature Conservation Act are known as "marine conservation areas".[56]

Compared to the CBD definition of the MPCA, the Norwegian definition MPA in regard to the areas protected is quite similar. The MPCA includes "any defined area within or adjacent to the marine environment, together with its overlying waters", while the Norwegian definition includes "areas where the seabed and/or the whole of the appurtenant water column or parts hereof are protected". While the Norwegian MPA is linked directly up to legislative protection, the MPCA does not make this connection "or other effective means, including custom". This difference may be attributed to the legal tradition in Norway, and conversely the CBD must include all possible effective protective measures applicable in tall signatory States domestic sphere. Another difference is that the AHTEG explicitly connects the "and associated flora, fauna, and historical and cultural features" to the areas protected, the Norwegian definition is silent with regard to the protection objectives. However, the features are indirectly included in the definition by the reference to the Nature Conservation Act[57] and other legislation.[58] In my point a view, this lack of a clear connection to biodiversity represents a weakness with the Norwegian definition, since it is not clearly understood what objective scope is sought. The Norwegian definition also lacks the clear and unambiguous link to the effects sought within the protected area. The AHTEG clearly states that "with the effect that its marine and/or coastal diversity enjoys a higher level of protection than its surroundings", even though it could seem superfluous to include the effects in the definition, it ensures that the protected areas have a content that actually has positive results on the marine biodiversity. Another important consequence of the inclusion of the effect on biological diversity is the exclusion of single issue/objective protected areas. Such areas are established for the protection of a singular species or natural

[56] Report to the Storting No. 12 (2001-2002) section 3.7.3.

[57] Act No. 63 of 19 June 1970 Relating to Nature Conservation.

[58] See further review in chapter 4.

feature, and the measures are correspondingly designed. A possible consequence of such areas is the weakening of the local biodiversity for the benefit of the in focus species.[59] The CBD focus on biodiversity therefore provides a useful limitation of the scope of the MPA. For the purpose of this thesis the term MPA will be applied to include all areas designated with the aim of protecting the marine biodiversity, by statutory law or provisions, either nationally or internationally. MPA is therefore, used a generic term for the described protective measure, regardless of the name specified by the legal tool providing the basis for the establishment.[60]

1.4 Delimitations

1.4.1 Regimes of resource management

When investigating international and domestic law relevant to marine biodiversity conservation, it is essential to differentiate such conservation regimes from regimes of resource management. The conservation regimes focus on the totality of the marine environment. Successful conservation is largely dependent on measures ensuring that complete ecosystems may function without damaging human interference. Resource management regimes have a different purpose; an economic gain from resources that are sustainable and healthy. There are a multitude of resource management regimes in international law. Many concern fishery management, but the subject-matter for management varies. These regimes characteristically have resemblances, one important being the economic nature and protecting the resources that mankind already know and utilize today. Clearly, there are also economic incentives of the conservation regimes, for it is evident that in the vast and largely unknown marine biological diversity there may potentially lay economic resources. Even though resource management is to some degree dependent on well-working ecosystems, one can view the resource management regimes to have a shorter time scope for success. In this respect conservation regimes

[59] See further related restrictions in sub-section 1.4.2.

[60] A generic definition of the MPA is offered by Czybulka, D., Kersandt, P (2000). “MPAs are such marine areas, whose ecosystems and biological components based on the general obligations under the CBD, because of their biodiversity, rareness and/or fragility; by means of appropriate measures and programmes, against damages and deterioration due to adverse effects of human activities are protected or, if they have already been adversely affected, must be restored where practicable”.

have a less immediate nature, as their focus is on future existence and utilization of biodiversity.

In theory, the differences of these regimes are evident. In practice they are not always easily discerned. This is because the effect following implementation of both types of regimes on human activity may be quite similar. Nevertheless, it is important to distinguish the two regimes, considering that their aim is fundamentally different. Why is it necessary when the effect for marine biodiversity may be the same, regardless of which regime is in effect? The answer to this lays, in my opinion, in the background of the regimes, as the background and the aim are so very different one must appreciate that even though the same measures may be available under both regimes, the implementation and enforcement of these measures could and must necessarily differ considerably. Throughout the thesis the main focus is on conservation regimes, resource management regimes will only be treated limitedly, and only when such a regime has particular relevance for biodiversity conservation.

1.4.2 Regimes of specific purpose or species protection and preservation

Also international regimes concerning specific purposes or species preservation fall beyond the scope of this thesis. The specific and constricted nature of these regimes combined with the clarity of their legal foundation gives them for the current purpose little more than exemplary interest, with regard to what measures that are implemented in connection with these regimes. The detrimental effect of pollution to the marine biodiversity and environment has been evident for a long time. As a result, pollution has been in focus globally, regionally, bilaterally and domestically. There is a vast specter of international rules and principles regarding marine pollution and pollutants, many of these both advocate regulatory schemes and measures to be implemented for the prevention of pollution.

1.4.3 Global climate change

The climatic change caused by human activity may also have serious consequences for the marine environment, e.g. via changes in temperature, shifts in the major ocean currents, effects on fisheries and rising sea levels. Rapid climate change caused by

global warming has affected vulnerable marine ecosystems and biodiversity, especially experiments reveal that practically all marine animals living in some of the coldest parts of the world are extraordinarily sensitive to very small increases in ambient temperature. Warming has altered habitats and ecosystems and forced marine species around the world to move into new ranges. When these issues fall beyond the scope of this thesis, this is mainly because marine protected areas are not thought to be well suited to protect biodiversity from global climate change. To combat these dangers other measures appear more suited.

1.5 Sources and methodology

The topic and scope of this thesis necessitate that the legal argumentation rests on both international and Norwegian sources of law, and consequently the use of international and Norwegian legal methodology.

In modern international law, sovereignty is one of the basic theoretical concepts and it has both internal and external aspects. In its internal aspect, sovereignty means that "a State's domestic policy falls within its exclusive jurisdiction, provided of course that it does not violate any obligation of international law."[61] External manifestation of a State's sovereignty in its relation with other States is its independence. The concept of equality of States is a corollary of the concept of sovereignty. The principle of legal equality of States is consolidated in modern international law, by being enshrined in international legal texts, i.e. the Charter of the United Nations, and manifested in international practice. In the continuance of this is the notion of the freedom of the sea. The freedom of the sea lies as a fundamental norm in international law, and serves as an example of the normative consequences of sovereignty and equality.

Art. 38 of the Statute of the International Court of Justice is widely recognized as "the most authoritative statement" as to the sources of international law,[62] it includes international conventions, international custom, and the general principles of law as the

[61] ICJ, Military and Paramilitary Activities in and against Nicaragua, Merits, ICJ Reports 1986, pp. 131.

[62] Shaw, M. N. (1997). p. 55. See also Brownlie, I. (1998). p. 3 and Oppenheim, L. F. L., A. Watts, et al. (1992).

primary sources. As subsidiary sources of determination of international law it considers judicial decisions and the teachings of the most highly qualified publicists of the various nations. The following overview will be comprised of the relevant sources to the State duty to establish MPA; international environmental custom, law-making conventions and soft law, and legal theory. There is no customary rule concretely regarding the establishment of marine protected areas; international conventional law must be regarded as the dominant source. Art. 31 of the Vienna Convention lays down the fundamental rules of interpretation of treaties and "can be taken as reflecting customary international law",[63] it provides:

> 1. A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.

The examination of treaty law is limited to a review of the Conventions which address the marine protected areas as a necessary or basic means of protecting marine biodiversity. Norway is a party to the following conventions of particular relevance: CBD, UNCLOS, OSPAR, the Bern Convention, the Ramsar Convention and the Cultural and Natural Heritage Convention.[64]

International soft-law plays an important part in the development of international environmental law. Soft-law norms are rules of conduct for the international practice, which are in principle not legally binding, but nonetheless show certain legal effects. National and international measures, for example the establishing protected areas, are reinforced by evolving principles of international environmental law and customary law. To date, the international binding obligations in regard to the protection of marine biodiversity are greatly policy obligations and are often without clear material content.

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[63] Shaw, M. N. (1997). p.656.

[64] International conventions affect the domestic legislation both directly and indirectly. Norway adheres to the dualistic tradition, meaning that conventions entered into do not automatically become Norwegian law. A particular legislative act is required. On the other hand, Norway's Supreme Court has at several occasions held that Norwegian legislation is presumed to be in accordance with international obligations. The result being that existing legislation will be interpreted to conform to international treatise and the duties therein.

The obligations can be viewed as a duty to implement legislation for the protection of marine biodiversity; but little is said in the binding documents how the goal is to be achieved. However, in international environmental law today, obligations do not solely arise from the legally binding texts. For the complete understanding of the material content of the duties laid upon States one must also take into consideration international declarations,[65] resolutions,[66] recommendations by international institutions,[67] policy documents and action plans.[68] Common for these instruments is that they in some way formulate international expectations and value statements.

Norway has attempted to play an important role in setting environmental issues on the international agenda, and has participated in the negotiation and formulation of both binding and non-binding international agreements. In the case of conservation of marine biodiversity and the use of marine protected areas, Norway has similarly participated in the development of the instruments which recommend the MPA as the foremost measure for protecting marine biodiversity from degradation. The so-called non-binding instruments contribute to interpret the meaning of the binding duties, but also give the duties material content. Therefore, it would not be in accordance with Norway's international duties to implement domestic legislation which in comparison to international obligations had inferior material content. Hence, Norway must in the future enact legislation which makes possible the establishment of MPAs. Furthermore, in these areas, restrictions capable of protecting marine biodiversity from the present hazards must be available. Soft law instruments such as the 1992 Rio Declaration and The Declaration of the World Summit for Sustainable Development, Johannesburg 2002 and UN General Assembly Resolution nr A/RES/57/141 may provide the basis for general application of environmental principles as well as for the development of customary international law. Certain principles originating in soft law, frequently repeated principles appearing in global and regional treaties, and provisions in draft treaties or treaties not yet in force may eventually attain the status of international customary law.

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[65] The Declaration of the World Summit for Sustainable Development, Johannesburg 2002.
[66] UNGA Resolution nr A/RES/57/141.
[67] CBD-COP-4, Decision IV-5, The Jakarta Mandate.
[68] Agenda 21, chapter 17.

The Norwegian sources used to establish the normative situation with regard to MPAs domestically are predominantly statutory acts with relevance to the establishment of marine protected areas; in addition arguments and facts from travaux préparatoires are presented and as well as legal theory. As of today relevant case law is sparse, and there are no judicial decisions directly concerning the MPA. The relevant sources are interpreted in accordance to Norwegian legal methodology.[69]

1.6 Outline

I will explore my topic in three parts. Part I examines the Marine Protected area as a legal measure. Part II explores Norway's duty to protect marine biodiversity by establishing protected areas, and also investigates the domestic legislation available to fulfill the obligations found in international law to establish protected areas in the marine sphere. In Part III the focus is on Norway's right, as a coastal State, under UNCLOS to establish marine protected areas.

[69] Eckhoff, T. and J. E. Helgesen (2001).

2 The Marine Protected Area

2.1 Background

Complex arrays of influences have contributed to the development of international law principles and provisions concerning marine protected areas. Time has shown that to protect marine environmentally sensitive areas, more and wider reaching restrictions are needed. The first reference to specially protected areas of marine space occurred in global instruments designed to conserve particular species and their habitat.[70] These conventions have later succeeded by more comprehensive instruments, which recognize the need to conserve whole marine ecosystems in coastal and offshore environments employing conservation methods such as specially protected areas.[71] Support for the establishment of marine protected areas has often been expressed in resolutions and other documents of governmental and non-governmental organizations at the global and regional level.

2.2 Conservation objective within the MPA

The MPA may be created for a range of conservation purposes. It is necessary to focus on these conservation purposes when discussing and evaluating the MPA. This is because the MPA may be differently designed and managed according to which conservation purpose is principal. Consequently, the MPAs may be examined along two axes; the conservation purpose axe and the restriction level axe.

The AHTEG concludes that current marine and coastal management and conservation practices are no longer adequate to deal with the complexity and magnitude of the problems. They emphasize that one of the reasons for the loss of marine and coastal

[70] Such as the 1946 International convention for the regulation of whaling.

[71] The CBD, OSPAR, Berne, Ramsar and World Heritage Conventions to mention some. The Conventions will be subject to review in chapter 3.

biodiversity is the very low level of development of marine and coastal protected areas.[72] The flexible nature of the MPAs, gives them the potential to conserve entire ecosystems that are unique, for example areas which are particularly rich in species or representative of biogeographically units, such as the ecosystem in connection with the Lophelia reefs.[73] A protected area may help maintain ecosystem productivity through safeguarding essential ecological processes by controlling activities that disrupt them or that physically damage the environment.

The AHTEG has pointed out many benefits of MPAs relating to both conservation and sustainable use of biological diversity. According to the report of the Expert Group, marine and coastal areas provide the best available strategy to ensure the effectiveness of integrated marine and coastal area management regimes.[74] That the creation of marine protected areas entail benefits is clear, AHTEG emphasized benefits of MPA includes: protecting ecosystem structure, functioning and esthetical value, and allowing recovery from past damage;[75] improving fishery yields;[76] providing other direct or indirect social and economic benefits, including through benefits to tourism, traditional uses of biodiversity, and other benefits of biodiversity;[77] increasing the understanding of marine biodiversity and systems, including by providing a baseline benchmark for identifying human-induced changes, allowing measurement of natural mortality; providing for areas for research where experiments are not affected by uncontrolled human activities;[78] and providing opportunities for the public to enjoy natural or relatively natural marine environments, and opportunities for public education and to allow the public to develop an understanding of the effects of humans in the marine environment.[79]

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[72] CBD:Executive-Secretary (2002) UNEP/CBD/SBSTTA/8/9/Add.1 para 6- 7.

[73] Experience to date has shown that area-based approaches to marine biodiversity conservation are a vital mechanism to address some of the threats posed by human activities.

[74] CBD:Executive-Secretary (2002) UNEP/CBD/SBSTTA/8/9/Add.1.

[75] Ibid. Para 12 (a).

[76] Ibid. Para 12 (b).

[77] Ibid. Para 12 (c) Other benefits include e.g., the wave reduction effects of reefs or kelp forests.

[78] Ibid. Para 12 (d).

[79] Ibid. Para 12 (e).

2.3 Restrictions in the MPA

The point of departure for human activity in the marine realm in this thesis is freedom of activity. The following sections will seek to identify common or desired restrictions of this freedom, which are used to preserve and protect the marine biodiversity. The restrictions investigated in the following, do not only deal with the most frequent and most practicable restrictions, but also those that for Norwegian conditions will be realistic. I will examine these measures in connection with the current and future threats to the marine biodiversity in the Norwegian Sea areas and finally, on the basis of the first two sections, I will seek to define some groups of MPAs. These groups are meant to supply an analytical tool for the later analysis of the legal basis for establishment of MPAs in Norwegian Sea areas.[80]

At the outset of a discussion about the design and attributes of a MPA, it would seem that the possibilities for creating individual measures and polices for each specific MPA are unlimited. The flexible character of the MPA allows ecosystem and biodiversity protection to be combined with other activities. A MPA can range from a highly protected category to one that provides for multiple uses. Further, a "multiple use" MPA has been advocated as a tool for providing an integrated management regime that can incorporate biodiversity conservation, fisheries, petroleum and mineral exploitation and extraction, tourism, military activities and research in a sustainable manner.[81] This resulting in that a single MPA can include a mosaic of management and restriction categories. The size of a MPA is dependant upon its use, in addition to other aspects such as legal jurisdiction and geographical features. Even though the MPA has a wide application scope, one must recognize that the protected area does not offer sufficient protection against all inherent threats to the marine biodiversity. Therefore, some threats will receive less attention than others.[82] It is quite frequent that large MPAs are divided into different zones; in which different measures and protection levels are valid. Prior to the establishment of a MPA there is research to identify the present biodiversity and the threats to this, to successfully design the restrictions in the MPA.

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[80] Chapters 5, 6 and 7.

[81] Warner, R. (2001)., p. 150

[82] Introduction of alien species, operational pollution to mention some

2.3.1 Restrictions for preventing pollution

Pollution represents a great threat to the marine biodiversity, and the sources for pollution into the marine environment are many and varied. For that reason the measures implemented to protect biodiversity from pollution must be designed in different ways. It is relevant to ask how well adjusted a MPA is to protect marine biodiversity against the damages caused by pollution; in my opinion it is necessary to consider this in relation to the different pollution activities.

There is little doubt that prohibiting passage of all ships or certain types of ships can be extremely effective for safeguarding the MPAs. A series of polluting activities, strictly connected with navigation, even though not classified as such by UNCLOS, is prevented. In general, it can be said that the real value of navigation restriction, or prohibition, is its preventive effect, or as de Klemm puts it:

> "The only way to ensure that ships do not release or dump pollutants may be to impose restrictions on navigation in certain areas as the no-dumping rule is extremely difficult to enforce except when the culprits are caught red-handed which of course is infrequent." [83]

Clearly, the banning of navigation in biodiversity rich areas will be an efficient means to protect it from pollution; both operational and accidental A less drastic restriction is the banning of all dumping and the creation of sea lanes, and mandatory ship reporting. The purpose of mandatory ship reporting is that coastal States should be able to track ships through a particular area. Should a ship leave its planned course, or if circumstances point at the risk of collision or grounding, the coastal state can then give a timely warning or take any other actions it deems appropriate. On the other hand, reduction and elimination of pollution is currently subject to many international agreements and is on the international agenda. It is also possible that geographically defined areas are not the best measure in the fight against marine pollution, and that measures regarding vessel construction and equipment, in combination with stronger restrictions from the vessel's State would be more effective on the whole.

[83] Klemm, C. d. and C. Shine (1993)., p. 260.

MPAs may be used to control pollution deriving from the petroleum industry. Relevant here are restrictions against the petroleum activity in the area or by setting certain relevant restrictions; e.g. qualifications regarding materiel and techniques used. The restrictions may be achieved in accordance with the petroleum legislation and by way of negotiations and later conditions with the commercial party. This way of regulating the effects of the petroleum dangers may be more efficient than the creation of MPA with connected restrictions.

In addition, threats posed by aquaculture and sea-ranching may be successfully avoided by the use of MPAs. One possible policy choice could be a restriction banning all aquaculture and sea-ranching industry. This would effectively reduce the threats. Less obtrusive, it might also be relevant to limit the type of aquaculture allowed or the number of sites within an area, in accordance with the particular qualities of the biodiversity which is sought protected. Other measures are applicable as well; for instance pollution regulations, and the possibility of setting conditions to the in combination with the licence necesarry to operate within a industry.

2.3.2 Restrictions for protecting species from overexploitation

There are already many management regimes in place for the protection of biological diversity against overexploitation. The regimes are often species specific, and occur both at regional and global level.[84] Here, the focus will be on restrictions aimed at preventing overexploitation harming biodiversity. Relevant restrictions in this regard are seasonal closures, bans on taking reproductive individuals and catch limits. The MPA is generally believed to provide protection from the major consequences of overexploitation in three ways. Firstly, they protect individual species from commercial or recreational harvest inside the boundaries. Secondly, they reduced habitat damage caused by fishing practices that alter biological structures, such as oyster reefs, necessary to maintain marine ecosystems. Thirdly, they provide protection from ecosystem over-fishing, in which the removal of ecologically pivotal species throws an ecosystem out of balance and alters it diversity and productivity.[85] The emphasis on the

[84] See delimitations in chapter 1.

[85] Salm, R. V., J. R. Clark, et al. (2000) pp. 161-164.

value of sustainable catch is dominant in all management of the marine resources. Therefore one could argue that protected areas are not the optimal conservation measure, since the purpose is not the utilization of resources, but rather the protection of resources. However, the use of protected areas combined with resource management regimes could have favorable results for the biodiversity.

2.3.3 Restrictions for preventing the introduction of species

Can MPA be a useful measure to inhibit the threats posed by introduction of alien species? Certainly the prohibition of outlet of ballast water in biodiversity rich or vulnerable areas could be an efficient way of avoiding the direct impact of alien species. On the other hand, protected areas may not be suited for stopping species introduced at other locations from extending their geographical habitat. This shows that protected areas alone will not be sufficient for protecting marine biodiversity. The IMO is currently working on these issues in relation to vessel based introduction of alien species.

2.3.4 Restrictions for preventing physical alteration

Common for the threats of physical alteration of the marine environment is that the MPA may reduce or omit their detrimental effect on marine biodiversity. The banning of equipment that is damaging to the marine environment like, for example bottom trawling and dynamite fishing gear. Also the banning of submarine structures, like cables and pipelines, would be preferential for the total conservation of the marine habitat and biodiversity. But since such drastic measures are not likely to be successful in general, less severe restrictions that would include the avoidance of valuable and vulnerable marine areas.

The hydrocarbon industry relies mainly on the construction of platforms on the sea bed; these platforms themselves represent a critical threat to the surrounding marine habitats. Allowing the conservation of the marine environment to be the decisive criteria when the locations of such platforms are decided would benefit the marine biodiversity. In connection with this industry also lies a different threat to the physical environment, namely the disposal of huge amounts of drilling mud and cuttings, and the effects of

channelisation, dredging, and filling. Restrictions aimed at reducing these threats, could include more processing before reintroduction to the marine environment.

2.3.5 Fully protected marine protected areas

In a fully protected marine area, no extractive use of any resource or any habitat destruction is allowed. In addition, measures have been implemented to reduce and prevent pollution. There is growing evidence that true marine reserves that offer a high level of protection are effective in achieving conservation objectives.[86] Benefits of such "no-take" areas can include insurance against recruitment failure and the resulting collapse of stocks prone to overexploitation, protection of genetic diversity in exploited species, and maintenance of ecosystem functions.[87]

2.3.6 Core zones and buffer zones

The problem of damage caused to a MPA by activities exercised outside its boundaries may be particularly difficult to resolve. This entails the need to impose prohibitions or restrictions on such activities, although they may occur far away.[88] The core zone of a MPA encompasses the geographical area where biodiversity is sought to be protected. The core zone is the main focus area for the conservation purpose and restrictions of human activity. The restrictions in the core may include all restrictions previously mentioned. It is important for successful protection that the core zone is sufficiently sized and that the restrictions are well adapted. For optimal protection of the marine biodiversity in the core zone, many nature conservationists argue that a buffer zone must be established surrounding the core. This type of combination of zones and restriction levels, is quite commonplace in the terrestrial sphere. The restrictions in the buffer zone have a more distant connection with the conservation purpose. Human activities are organized to not hinder the conservation objectives of the core area but rather help to protect it, hence the idea of "buffering". It may be an area for experimental research, for example to discover ways to manage natural vegetation and

[86] Norse, E. A. (1993)., p.219.

[87] ibid

[88] Klemm, C. d. and C. Shine (1993)., p. 261.

fisheries, to enhance high quality production while conserving natural processes and biodiversity, including sea bed resources, to the maximum extent possible. In a similar manner, experiments can be carried out in the buffer zone to explore how to rehabilitate degraded areas. It may accommodate education, training, tourism and recreation facilities.[89]

2.4 MPA in a regional perspective

Biodiversity does not respect jurisdictional boarders, and ecosystems exist and function unaffected by these. In the marine environment this reality is even more evident than in the terrestrial realm. The fluidity of water, the currents and a multitude of other natural factors, strongly suggest that the marine environment is even less containable to national jurisdictions than the terrestrial realm. This contributes to successful conservation and protection of marine biodiversity being largely dependent on multinational cooperation. Today, multilateral environmental cooperation functions on both a regional and global level. The regional level has several apparent benefits; as opposed to both the national MPA and the globally established MPA. Firstly, the geographical vicinity present in a region is conducive to the cross-national nature of ecosystems, environmental threats and movement of species. Secondly, neighboring states often have similar environmental dangers, as well as experience in dealing with each other. Thirdly, the geographical scope of regions is well adjusted to successfully conserve ecosystems. Therefore, the regional MPA is an important supplement to the coastal State established protected area. Though the regional level may be important in some cases, it can hardly replace the national initiative and one must appreciate the added difficulties for establishing and agreeing upon restrictions in a regional multilateral MPA. On the other hand it is important to realize and value the conservation possibilities, potential and effectiveness which lay in multilateral and network-based MPAs.

That global and regional cooperation are necessary to protect and preserve the marine environment is recognized in UNCLOS art. 197:

[89] UNESCO - MAB (2003).

> "States shall cooperate on a global basis, directly or through competent international organizations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with this Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features."

Art. 197 is the basis on which a wide range of regional agreements dealing with the prevention and elimination of pollution of the marine environment as well as the protection and preservation of the marine ecosystems and habitats has been adopted, e.g. OSPAR. These modern agreements fill the legal frame of UNCLOS, and further its general principles, which are expressively intended by art. 237(1) of UNCLOS. Altogether, marine environmental law-making is a dynamic process showing a strong tendency towards regionalization. A similar obligation to cooperate found in the CDB, where art. 5 urges the contracting parties to cooperate with each other directly or when appropriate, through competent international organizations for the conservation and sustainable use of biological diversity. Nations should, in regard to CDB, prevent damage to areas outside national jurisdiction and cooperate for conservation and the sustainable use of biodiversity.

The UN regional seas program serves as an international framework concerning the protection of the marine environment in the regional context.[90] The program includes an article providing for the establishment of specially protected areas.[91] In the next section I will focus on the regional cooperation relevant to the Norwegian Sea areas; the Convention for the Protection of the Marine Environment of the North-East Atlantic, OSPAR.

2.5 MPA in an international perspective

In recent years the emphasis has shifted from concern with protecting the marine environment simply by trying to reduce and prevent pollution to a realization of the need to take more positive measures to conserve marine life and habitats. This trend is illustrated to some extent in the Law of the Sea Convention itself, art. 194(5) which provides that measures taken under Part XII (on the protection and preservation of the

[90] Areas under the regional seas programme are The Barcelona Convention for protection of the Marine Environment and the Coastal region of the Mediterranean.

[91] UN Secretary-General (2003), para. 215.

marine environment) “shall include those necessary to protect and preserve rare and fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life”, and is perhaps best exemplified in the protocols on specially protected areas attached to some of the UNEP Regional Seas Conventions.[92]

The International Maritime Organization have issued guidelines for the identification of Particularly Sensitive Sea Area,[93] and together with the MARPOL special areas,[94] today provide the only template for international consideration and endorsement of specially protected areas of ocean space.[95] The IMO administers several conventions which are useful in regard to area protection. MARPOL 73/78 addresses specific sources of pollution such as intentional vessels discharges and imposes discharge restrictions on vessels transiting vulnerable marine areas.[96] The convention provides for the designation of “special areas” where the discharge of oil, noxious liquid substances and garbage is controlled more strictly than in the generally applicable international standards. Ship routing and reporting measures to protect environmentally sensitive areas and marine species are available both under the SOLAS convention, and the IMO General provisions on ships’ routing. Routing measures include the establishment of areas to be avoided, or non-anchoring areas to protect, such as coral reefs. A mandatory ship reporting system can be adopted by IMO to protect particularly sensitive areas or species in the territorial sea or the exclusive economic zone.[97]

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[92] An overview is given at http://www.unep.org/themes/marine/#seasregions.

[93] See definition in note 49.

[94] The North Sea is designated as a Special Area under Annex V: Regulations for the prevention of pollution by Garbage. Regulation 5 identifies the following special areas, in which there are strict controls on disposal of garbage.

[95] There are currently six designated PSSAs: the Great Barrier Reef, Australia (designated a PSSA in 1990); the Sabana-Camagüey Archipelago in Cuba (1997); Malpelo Island, Colombia (2002); Around the Florida Keys, United States (2002); the Wadden Sea, Denmark, Germany, Netherlands (2002); and Paracas National Reserve, Peru (2003). www.imo.org (02.01.2004).

[96] The MARPOL convention addresses five types of pollution by ships; oil (Annex I), noxious liquid substances in bulk (Annex II), harmful substances in packaged forms (Annex III), sewage (Annex IV),[96] and garbage (Annex V).

[97] UN Secretary-General (2003) paragraph 213.

2.6 The interaction between national, regional and global MPAs

Where the rules concerning state established MPAs are considered inadequate to provide sufficient ecological protection for certain areas of the EEZ, the coastal State may adopt regulations implementing international rules and standards or navigational practices which the IMO has made applicable to special areas, or it may adopt additional regulations of its own, provided these do not impose design, construction, manning or equipment standards on foreign vessels other than generally accepted international rules and standards. The coastal State must follow certain procedural requirements. These include consultation of the IMO and obtaining its approval, and giving at least fifteen months' notice of entry into force of the coastal State regulations UNCLOS art. 211(6).

In the US application, for the designation of the Florida Keys as a PSSA, the area in question is predominantly within the US Territorial Sea, with a small portion extending beyond 12 nautical miles into the U.S. Contiguous Zone.[98] The same area is also protected under U.S domestic law, i.e. by the establishment of The Florida Keys national Marine Sanctuary in 1990. The U.S. application thus illustrates that even within the territorial sea, where the environmental jurisdiction given to the coastal state by UNCLOS is greatest, the need for the international MPA on the same area is necessary to fully protect the ecosystems and biodiversity.

Whilst there are currently many thousands of MPAs, they tend to be in scattered locations. This is often a consequence of their establishment by individual States following their own priorities or those of other organizations such as NGO,[99] GO,[100] or other groups.[101] Enshrined in the principles of MPAs is the need for connectivity. For various reasons, including the risk of maintaining small, localized populations susceptible to natural and man-made threats and lack of genetic exchange, it is important to maintain networks of protected areas, not just individual sites. This is particularly important to marine systems which rarely are strictly delineated, and are

[98] IMO:United-States (2001).section 2.4.

[99] WWF

[100] IUCN and Ramsar

[101] ICES

fluid in nature, connected by a flux of species, recruits, nutrients and pollutants, etc., from outside an area.[102]

The trend of discussing and establishing MPAs, at a larger scale and further at sea than before, is described by Russ and Zeller as the beginning of a shift "From Mare Liberum to Mare Reservarum".[103] They contribute this shift from essentially national or regional environmental considerations, to global action and to the realization that no single stock, meta population, or even ecosystem can be considered in isolation. The global community is beginning to understand that issues such as the impacts of pollution, overexploitation of biological resources and physical alterations, need to be addressed at the scale at which they occur, globally. There is ample support for the general concept of marine protected areas offering comprehensive protection for designated areas of ocean space both within and beyond national jurisdiction. Regional and national implementation of MPAs offers precedents for relevant protective measures and the accommodation of such measures with other ocean uses such as navigation, fisheries, mining, leisure and military activities.

[102] Cripps, S. J. and S. Christiansen (2001)., p. 115.

[103] Russ, G. R. and D. C. Zeller (2003), p. 75.

PART II. NORWAY'S DUTY TO PROTECT MARINE BIODIVERSITY BY ESTABLISHING MPA'S

In this part I will investigate the international legal framework for the establishment of protected areas in the marine environment and the domestic provision which enable the establishment. The international norms here examined are those which establish a duty on the State party to protect and conserve marine biodiversity by ways of establishing protected areas. Later, in Part III I will investigate the coastal States right to establish such areas within the jurisdictional regime set forth by UNCLOS, and there I will seek to clarify the possible conditions for establishing such protected area. Here, however, focus is to clarify Norway's current international obligations in regard to protecting marine biodiversity by MPA. In chapter four I will investigate the current Norwegian domestic legislation concerning the obligation to protect marine biodiversity by legislation and executive acts, and the criteria for establishing protected areas in order to conserve the marine biodiversity.

3 International legal framework

3.1 The Biodiversity Convention[104]

The question relevant for this thesis is if the CBD provides a duty for the establishment of marine protected areas. Whether, coastal States have the right to establish MPAs I will study in Part III. In the following, I first investigate whether CBD requires that the contracting parties establish MPAs. Then, I will attempt to establish the nature of the protected areas prescribed by the CBD, to see if the Convention prescribes concrete requirement for protected areas.

For my purpose, the CBD's provisions regarding the ecosystem approach[105] and in-situ protection[106] are of special interest since these are closely linked to the purpose of the MPAs here investigated. The issue of in-situ conservation,[107] encompassing the designation of protected areas, is in focus in art. 8. Art. 8 a) and b) provide for the creation of protected areas by stating:

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[104] The Convention on Biological Diversity was agreed upon at the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil, 5 June 1992. Norway ratified the Convention 11 June 1993, 11-06-1993 kgl.res. CBD's objective is made clear by its preamble and art. 1; it may be summarized as the conservation and sustainable use of biological diversity for the benefit of present and future generations. In addition, the Convention launched the concept of biodiversity. Acceptance of biodiversity as a legal concept contributed to the increased focus on the legitimacy of the ecosystem approach and in a fundamental shift in environmental policy thinking. The biodiversity treaty gained rapid and widespread acceptance.

[105] The preamble section 9 provides "Noting further that the fundamental requirement for the conservation of biological diversity is the in-situ conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surrounding".

[106] Art. 8.

[107] Art. 2 "in-situ conservation" means the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and. In the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties.

> "Each Contracting Party shall, as far as possible and as appropriate:
> a) Establish a system of protected areas where special measures need to be taken to conserve biological diversity;
> b) Develop, where necessary, guidelines for the selection, establishment and management of protected areas or areas where special measures need to be taken to conserve biological diversity;"

The CBD definition of protected area was explored in 1.3.2. There, I argued for that in the case of marine biodiversity protection the more precise definition of MCPA should be utilized, even though this has not yet been accepted by the COP. The use of the MCPA definition entails that the ambiguity created by the general definition of protected area in art. 2 is reduced. The Parties discretion in regard to the material content of the obligation following art.8 is significant, "as far as possible and as appropriate". However, the content requirements in the MCPA definition contribute to narrow the discretion bestowed on the State Parties, compared to what would be the case if the definition after art. 2.

It is interesting to examine the limits of the discretion further; do the State parties have the right not "to establish a system of protected areas"? Or does the discretion only regard the content of the measures, and not the establishment of such measures. Would such a distinction have any practical relevance? The question is if it is meaningful to discuss protected areas without restrictions.[108] A different question is what is considered to be "valid" arguments under the States discretion. Should limited resources be included, and should it perhaps be the only "valid" argument. What about the manner of compliance, "as appropriate", are there any minimums which must be met, these questions are not yet answered by the CBD organs.

In 1995, the Conference of the Parties[109] reached a consensus on the importance of the conservation and sustainable use of marine and coastal biological diversity, commonly referred to as the "Jakarta Mandate on Marine and Coastal Biological Diversity"[110].[111] When investigating the current status of MPAs under the CBD, the Convention's

[108] See the above discussion about the definition in art. 2.

[109] Hereafter: COP.

[110] Hereafter: The Jakarta Mandate.

[111] CBD:COP (1995). Decision II/10

general articles must be considered in light of the more specific Jakarta mandate, and later developments. The Jakarta Mandate is of special relevance for the interpretation of art. 8. Protected areas are given special importance in the Annex to the Jakarta mandate. The Annex' section B. "Basic principles" no.3 states that "Protected areas should be integrated into wider strategies for preventing adverse effects on marine and coastal ecosystems from external activities and take into consideration, inter alia, the provisions of art. 8 of the Convention" Program element 3 regards marine and coastal protected areas. It defines two operational objectives, 3.1 and 3.2.[112] The COP noted that protected areas should be integrated into wider strategies for preventing adverse effects to marine and coastal ecosystems from external activities. Furthermore, the Parties have consistently identified that their efforts to develop and maintain their national protected area system is the central element of their strategy to implement the Convention.[113]

How should the norms of the Jakarta Mandate effect the interpretation of obligations which initially bestow a high discretionary level on the State Parties? These can be considered as lex specialis with regard to marine biodiversity conservation. Elements must be the context the decisions were adopted in (COP), the content of the decisions (work programme) and the form the decisions were adopted in (basic principles).

The CBD can not be held to explicitly lay a duty on the contracting parties to establish marine protected areas. Nevertheless, there is a strong encouragement and incentive to do so in art. 8, and the supplementary Jakarta Mandate. Norway has committed to this mandate, and therefore there is a strong incentive to utilize protected areas for the conservation of marine biodiversity.

Does the CBD prescribe concrete or substantial requirements for protected areas? This question is relevant because requirements could represent a material minimum level of

[112] 3.1 seeks to facilitate research and monitoring activities in connection with the value and the effects of marine and coastal protected areas on sustainable use of marine and coastal living resources. The purpose of 3.2 is to develop criteria for the establishment of, and for the management aspects of, marine and coastal protected areas.

[113] This work has not been completed. At COP 7, February 2004, the role of protected areas, including MPCA, in the preservation of biological diversity is on the agenda.

restrictions imposed in Norwegian MPAs. The Convention text does not explicitly provide for concrete measures or restrictions within a protected area. However, the Convention's main aim and focus "the conservation of biodiversity" and the measures it suggests employed to reach this result, support the position that restrictions on human activity at least must be apt of conserving the marine biodiversity. In addition, it is arguable that if an area first is designated as a protected area, there is a duty to implement measures and restrictions in that area. Should this not be the case, the fulfillment of the obligation to exercise in-situ conservation would be very easily satisfied. Furthermore, the AHTEG definition includes requirements pertaining to the restriction level.[114] Should COP-7 endorse this definition, one might in future argue that this represents a substantial requirement to MPCAs.

The geographical scope and jurisdictional limits of the Convention also has importance for the MPA because it limits the applicability of the Convention. CBD jurisdictional scope is regulated by art. 4:

> "The provisions of this Convention apply, in relation to each Contracting Party: (a) In the case of components of biological diversity, in areas within the limits of its national jurisdiction…"

The criterion "limits of its national jurisdiction" must be seen in connection with the jurisdictional regime given by the law of the sea.[115] Consequently, CBD applies to the coastal States' territorial sea. If the coastal State has declared an EEZ within the framework of UNCLOS, the CBD will also be applicable within the EEZ limits, to the extent of coastal State jurisdiction.[116] CBD is not applicable to components of biological diversity that are outside the limits of national jurisdiction.

Art. 4 creates a clear link between the CBD and UNCLOS. This link is further dealt with in CBD art. 22. It concerns the relationship of the Convention with other international agreements, and the need to reconcile its implementation in relation to the marine environment with UNCLOS. Art. 22 provides:

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[114] see section 1.3.2.

[115] Art.. 22.

[116] Vierros, M., S. Johnston, et al. (2001)., p. 170

> "2) Contracting Parties shall implement this Convention with respect to the marine environment consistently with the rights and obligations of States under the law of the Sea."

This requirement indicates that measures to implement the Convention may not contradict or undermine national rights and obligations deriving from the law of the sea as defined by international customary and treaty law. It also implicitly means that the law of the sea can be used to support the implementation of the Convention.[117] Accordingly the duties of the conservation of the marine biological diversity posed by the CBD are subject to the rights and jurisdictional regime of UNCLOS. I will examine the implications of this under Part III.

In conclusion, the CBD poses a duty to protect biodiversity and includes marine biodiversity. Art. 8 encourages the Parties to employ in-situ conservation schemes, but does not give any closer details to which attributes these protected areas should have. When applying the CBD on the marine biodiversity one must necessarily take the Mandate, and later developments under consideration. Since the agreement of the Jakarta Mandate several comities have been investigating the closer details of protected areas; both with regard to which areas and biodiversity should be protected and how these areas should be restricted and managed. As of today, no recommendation or authoritative mandate has been issued in relation to marine protected areas.

3.2 The United Nations Law of the Sea Convention[118]

UNCLOS is the international community's attempt to holistically regulate the law of the sea. UNCLOS provides general support for the protection and preservation of the marine environment, including the maintenance of rare and fragile ecosystems. In regard to the conservation of marine biodiversity, the fifth section of the preamble puts the use of marine resources, the conservation of the living marine resources and the

[117] Warner, R. (2001). p.

[118] The negotiation of UNCLOS III was concluded at Montego Bay on 10 December in 1982, and the treaty entered into force 16 November 1994. Norway ratified the treatise 14 June 1996 and it entered into force for Norway 24 July 1996.

protection and preservation of the marine environment on the agenda. The preamble is followed up by the Convention's Part XII, and deals with the "Protection and preservation of the marine environment".

The first question I will examine in this subsection is: does UNCLOS provide for protection and conservation of marine biodiversity? The second question regards the main topic in this thesis - the protected areas; does UNCLOS require or provide for establishment of protected areas for conserving marine biodiversity? The jurisdictional issues that may arise in the establishment of MPAs will be subject to examination in chapters 5, 6 and 7. These questions will therefore not be attended to in this chapter.

The starting point in the search for an obligation to protect the marine biodiversity by protected areas is in Part XII art. 192, which states that: "States have the obligation to protect and preserve the marine environment." I will now examine the legal content of this "obligation". The textual interpretation together with the norm creating character of the Convention suggests a legal duty. Other instruments of interpretation indicate that the contracting Parties did not intend to enact such a broad and unclear obligation.

The diffuseness of the obligation is itself an argument against regarding art. 192 as a legally binding norm. Furthermore, history reveals that while drafting the article in 1970 it was agreed upon in a preliminary meeting and was never subject to further discussion. The complex procedure of the negotiations played a crucial role while shaping the legal framework of the protection and preservation of the marine environment. Indeed, in a general setting of growing international environmental concern, the interests of the shipping States more than once collided with those of the coastal States.[119] The vague and ambiguous terminology has to be understood as a sort of agreement between the participants to further disagree. These factors suggest that the Parties did not view the article as more than a program and policy statement. The UN Secretary-General holds that "UNCLOS provides a global framework for the protection and preservation of the marine environment. Art. 192 of UNCLOS establish a general obligation for States to

[119] Franckx, E. (1995). p. 254

protect and preserve the marine environment".[120] This statement may indicate that the norm must be viewed to have some legal content today.

A closer look at the content of the term "marine environment" is of interest in regard to art 192 as well as the use of it in the title to part XII. It is an open term which could encompass all living and non-living resources and other features in the oceans, as well as the environment as habitat. The common understanding of the term "environment" is the objects or the region surrounding anything, but also the complex of physical, chemical, and biotic factors that act upon an organism or an ecological community and ultimately determine its form and survival. UNCLOS does not give a commanding definition. At the seventh session (1978) the Chairman of the Third Committee reported that it was understood that the term "marine environment" included "marine life".[121] The content is also a point of some discussion; two directions can be identified and variances revolve around the question if the term is meant to include the resources of the seas and oceans. The focus during the negotiation was predominantly on resource exploitation,[122] and if the term marine environment should comprise all resources, the exploitation regimes could easily be distorted by i.e. coastal States under their environmental jurisdiction. Having made this point of caution, I will in continuance regard the term to at least include biodiversity as defined by the CBD.

The answer to the question posed about the legal content of art. 192 must be that it is not a legally binding duty, as it is not possible to construe the material content of such a duty. Lack of effective measures to protect the marine environment does not represent a breach of the Convention. The correctness of this conclusion may be questioned; especially when the interpretation is not in accordance with a pure textual interpretation of the provision may be raised. However, I consider the totality of sources investigated to be in accordance with this conclusion. As a consequence the article must rather be viewed as a general principle. It should, therefore, influence the interpretation of the Convention as a whole.[123] Furthermore, the regime of UNCLOS results in that the

[120] UN Secretary-General (2003) para. 197.

[121] Articles 192 to 278, Final Act, Annex VI

[122] Platzøeder (2001), p.138.

[123] Vienna art 31(2).

obligation of art. 192 is always subject to the specific rights and duties laid down in the Convention. The questions whether even the most extreme examples of environmental degradation should fall beyond the scope of the provision, or if the article entails a minimum level of protection are today still unanswered. In the future answers may be found in a dynamic interpretation of the provision, related sources and evolving State practice.

Albeit an explicit duty to protect biodiversity cannot be founded in art.192, the system and subsequent provisions in Part XII provide a fragmentary protection for marine biodiversity. This protection encompasses the specific threats posed by pollution and unsustainable catch. Since these are serious and massive threat to marine biodiversity, the UNCLOS regulations de facto provides substantial protection for biodiversity. But as outlined earlier other threats exist. The question if UNCLOS provide protection for the marine biodiversity, the answer must be affirmative. The interesting question is rather if marine biodiversity is protected against other threats than those specifically given by UNCLOS? The answer must be found in an interpretation of relevant provision, which I will study thoroughly in Part III.

Resolution nr A/57/141 adopted by the UN General Assembly called for the States to cooperate and to take measures to implement Part XII of the Convention to protect the environment and its living resources.[124] Paragraph 53 has relevance for the protection of marine biodiversity by MPA, there the General Assembly:

> "Calls upon States to promote the conservation and management of the oceans in accordance with chapter 17 of Agenda 21 and other relevant international instruments, to develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012 and time/area closures for the protection of nursery grounds and periods, proper coastal and land use and watershed planning, and the integration of marine and coastal areas management into key sectors;"

[124] 10 December 2002 the UN general assembly adopted a comprehensive resolution on Oceans and the Law of the Sea. UN A/RES/57/141 Chapter XI, especially paragraph 41.

The UNGA endorsed the provisions of the WSSD with respect to the needs for representative networks of MPAs by 2012. It highlighted the need for international programmes to halt the loss of marine biodiversity and called for urgent and coordinated action to integrate and improve the management of seamounts and other underwater features.

In conclusion I have found that the Convention devotes a number of provisions to the protection and preservation of the marine environment, and to the conservation and management of living resources, but the notion of marine protected areas does not appear in the text. No general provision regarding the designation of MPAs can be found in the Convention text.[125] Since there is no explicit provision supporting the creation of protected areas there is no duty to establish MPAs for the protection of marine biodiversity.[126] The question whether a right to establish MPAs follows of the provisions contained in UNCLOS, will be undertaken in Part III.

3.3 The OSPAR Convention – Annex V[127]

Here, I want to explore whether the OSPAR Convention imposes a duty on the Contracting Parties to establish MPAs for conserving marine biodiversity. The OSPAR

[125] The convention contains only two provisions on special areas: art. 234 on ice-covered areas, and art. 25, paragraph 3 on specified areas for the protection of coastal state security. The legislative history of art 234 shows that the notion of special areas did not meet much enthusiasm. This provision was finally and reluctantly included in the Convention to satisfy Canada and Norway arguing that otherwise irreparable damage would be done in the arctic. Art. 234 is the only special area recognized by UNCLOS beyond the territorial sea, applies only within the EZZ, and is strictly limited to coastal state law and regulation on ship-generated pollution. Art. 25 provides for the only specifically mentioned special area in the territorial sea. In addition some other provisions UNCLOS contains provision providing for creation protected areas for specific purposes and under strict conditions only. These will be examined in Part III, common for these protected areas is that UNCLOS sets strict conditions for their establishment and enforcement, and consequently it is not possible to widen their scope to allow general biodiversity conservation.

[126] Papanicolopulu, I. (2000). p. 296.

[127] Annex V and Appendix 3 on the protection and conservation of the ecosystems and biological diversity of the maritime area was agreed upon at the ministerial meeting at Sinstra, Portugal, 23 July 1998. Norway ratified the agreement 20 April 2001 by kgl.res. godkjenning. For Norway the Annex entered into force 22 July 2001.

treaty is the most important regional treaty for the protection of the North Sea. Its geographical scope covers the North-east Atlantic Ocean including the North Sea.

According to the third recital a central objective of OSPAR is the creation of a legal framework for concerted action at all levels to manage human activities "in such a manner that the marine ecosystem will continue to sustain the legitimate uses of the sea and meet the needs of present and future generation." The general obligation regarding the protection of the marine environment in the North –East Atlantic is stated in Section 1 (a):

> "The Contracting Parties shall, in accordance with the provisions of this Convention, take all possible steps to protect the maritime area against the adverse effects of human activities so as to safeguard human health and to conserve marine ecosystems and, when practicable, restore marine areas which have been adversely affected."

The OSPAR Convention text is focused on marine pollution.[128] The establishment of MPAs within the OPSAR framework was discussed and decided upon at the Ministerial Meeting of the OSPAR Commission in 1998. This agreement was formulated in "Annex V". MPAs within the OSPAR framework would contribute to fulfilling the Contracting Parties obligations under other Conventions.[129] Annex V, art. 2 litra a) defines the States duties:

> "Contracting Parties shall:
>
> a) take the necessary measures to protect and preserve the ecosystems and the biological diversity of the maritime area, and to restore, where practicable, marine areas which have been adversely effected."

It contains important provisions concerning the protection and conservation of the ecosystems and biological diversity of the marine area, and thus supplements the general duty to "conserve marine ecosystems" and to "protect…against the adverse effects of human activity" that is not only caused by pollution and the like. The declared aims for OSPAR MPAs are to protect, conserve and restore species, habitats and

[128] Arts. 3, 4, 5, and 7.

[129] The fifth North Sea Conference in March 2002, requested the designation by 2010 relevant areas of the North Sea as marine protected areas belonging to a network of well managed sites, safeguarding threatened species, habitats and ecosystems functions, as well as areas which best represent the range of ecological and other relevant character in the OSPAR area.

ecological processes which are adversely affected as a result of human activities; to prevent degradation of and damage to species, habitats and ecological processes, following the precautionary principle; and finally to protect and conserve areas that best represent the range of species, habitats and ecological processes in the OSPAR area.[130] The contracting State must submit an application to the Commission, thereafter the Commission will assess if the areas fulfills both ecological criteria[131] and practical criteria[132] for the OSPAR MPA network.

The implications of OSPAR pose a responsibility on Norway to follow up Annex V. OSPAR may therefore be interpreted as a regional agreement which lays a duty on contracting parties to regulate certain areas, as MPAs. The further content of this obligation is not given, and thus the States discretion is high in regard to which restrictions are applied within the MPA.

3.4 The Berne Convention[133]

The general aim of the Convention on the Conservation of European Wildlife and Natural Habitats is stated in art. 1:

> "1.The aims of this Convention are to conserve wild flora and fauna and their natural habitats, especially those species and habitats whose conservation requires the co-operation of several States, and to promote such co-operation.
> 2. Particular emphasis is given to endangered and vulnerable species, including endangered and vulnerable migratory species."

The Convention urges the conservation of all flora and fauna species and their habitats, regardless of their scarcity. The word "wild" before flora and fauna is meant to exclude

[130] OSPAR MPA 02/8/1-E, Annex 4 p.1.

[131] OSPAR MPA 02/8/1-E, Annex 4 p.3 (Annex A).

[132] OSPAR MPA 02/8/1-E, Annex 4 p.4 (Annex B).

[133] The Convention on the Conservation of European Wildlife and Natural Habitats was done at Berne on 19 September 1979, it entered into force 1 June 1982. It is a regional Convention under the auspices of the Council of Europe. Norway ratified 18 April 1986, 18-04-1986 kgl.res. It entered into force for Norway 1 September 1986.

animals or plants stemming from bred or cultivated stocks.[134] This narrows the application of this convention in comparison to the CBD; where all biodiversity, regardless of cultivation, is included. Therefore, the MPA enacted in accordance with Berne Convention has a somewhat limited scope. In the marine sphere this may not have big implications, as reared species are less frequent than in the terrestrial realm. This may be changing in the near future, with the augment of aquaculture and sea-ranching industry.

In the investigation of whether the Convention lays a duty on the State party to create MPAs, Chapter II is relevant. It deals with the conservation of habitats, art. 4, (1), states that:

> "Each Contracting party shall take the appropriate and necessary legislative and administrative measures to ensure the conservation of the habitats of the wild flora and fauna species, especially those specified in the Appendices I and II, and the conservation of endangered natural habitats."

Together with Chapter III, which is concerned with the protection of species, this chapter covers the two principal approaches to nature conservation. Drafting the text, the experts felt that this article should not be too explicit in order to keep it open for developing co-operation between the Contracting Parties, *inter alia* in respect of the creation of a network of biogenetic reserves, the protection of wetlands, etc.[135]

The geographical scope of the Convention is not stated. It must therefore at least include the contracting State's territory. In the marine sphere it must at least be applicable in the marine areas denominated internal waters by UNCLOS. Furthermore, most coastal States give application to their environmental legislation in the territorial seas. Good reasons may therefore be presented for the application of the Convention

[134] CoE (2003) The explanatory report is prepared on the basis of the committee's discussions and submitted to the Committee of Ministers of the Council of Europe. It does not constitute an instrument providing an authoritative interpretation of the text of the Convention although it may facilitate the understanding of the Convention's provisions.

[135] Ibid.

also in the territorial sea. Art. 21(1)[136] permits the contracting State to withdraw areas of its territory from the Convention. This opportunity may favor the interpretation which includes the territorial sea in the Conventions geographical scope, since the States are free to exclude this area. Norway has declared that "In accordance with paragraph 1 of art. 21, this Convention shall apply to the continental territory of the Kingdom".[137] The "continental territory" must be interpreted to exclude the marine territory from the application of the Convention. Thus, there may not be derived any international duty to establish MPAs for Norway from the Berne convention.

3.5 The Ramsar Convention [138]

Ramsar provides a framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. The definition of the term wetlands includes most coastal areas in the world.[139] Ramsar provides for the creation of protected areas, and for these areas to be included in a List of Wetlands of International Importance. Art. 2 (1) states:

> "Each Contracting party shall designate suitable wetlands within its territory for inclusion in a List of Wetlands of International Importance, hereinafter referred to as "the list" which is maintained by the bureau established under art. 8. The boundaries of each wetland shall be precisely described and also delimited on a map and they may incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six meters at low tide lying within the wetlands, especially where these have importance as waterfowl habitat."

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[136] "Any State may, at the time of signature or when depositing its instrument of ratification, acceptance, approval or accession, specify the territory or territories to which this Convention shall apply.".

[137] Declarations made at the time of deposit of the instrument of ratification, on 27 May 1986 - Or. Engl. At http://conventions.coe.int/Treaty/EN/CadreListeTraites.htm (02.01.2004).

[138] The Ramsar Convention was concluded on February 2 1971. UN registration: 17-02-1976 14583. Norway signed the Ramsar Convention 9 July 1974, and it entered into force for Norway 21 December 1975. 14-06-1974 kgl.res.

[139] Art. 1. "areas of marsh, fen, peatland or water, whenther natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters.".

Norway has designated more than 30 areas under the Ramsar Convention.[140] In consideration of the Ramsar areas in regard to general marine diversity conservation one must appreciate the limitations which lay in art 2 which excludes great parts of marine biodiversity. In addition, the relative shallow scope of the areas in focus may contribute to a divide in ecosystems. From the Ramsar perspective such a divide may be unproblematic; but from a marine biodiversity conservation point of view the divide may be less fortunate. The Parties obligation under the Convention is further elaborated in art. 4.1:

> "Each Contracting Party shall promote the conservation of wetlands and waterfowl by establishing nature reserves on wetlands, whether they are included in the List or not, and provide adequately for their wardening."

There cannot be established a duty for State Parties to establish protected marine areas under the Ramsar convention, but States are not considered Parties until at least one site has be included on the List. Nevertheless, should an area first be established the questions whether there are legal implications in regard to later alteration of the areas status and if there are criteria with regard to the restrictions implemented to sustain an area under the Ramsar regime. For the purpose of my investigation no duty can be inferred.

3.6 The World Heritage Convention [141]

The Convention provides for the establishment of a World Heritage List and a List of World Heritage in Danger with a view of protecting the cultural and natural heritage.[142]

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[140] An overview of these areas can be found at found at http://www.miljostatus.no/.

[141] The UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage. Paris, 16 November 1972. Norway ratified the Convention 11 February 1977, and it entered into force for Norway 12 May 1977. 11-03-1977 kgl.res.

[142] World Heritage Convention (1972) art. 2 defines "natural heritage":

"natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;

geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation;

natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty. ".

A number of marine areas have been designated on these lists. The Convention is applicable to areas within each Parties national jurisdiction, see articles 3, 4 and 11.1. It has focus on in-situ protection, and provides as follows in art. 5:

> "To ensure that effective and active measures are taken for the protection, conservation and preservation of the cultural and natural heritage situated in its territory, each State Party to this Convention shall endeavor, in so far as possible, and as appropriate for each country:
> …
> d) to take the appropriate legal, scientific, technical, administrative and financial measures necessary for the identification, protection, conservation, presentation and rehabilitation of this heritage;"

To be listed, and subject to the special management requirements a site must meet the strict and evolving criteria. For MPA under the Convention the World Heritage Committee has drafted specific criteria which are provided in the Operational Guidelines. Relevant for MPA are the "outstanding"-categories given in section D paragraph 44 a) ii and iv. In addition the site must fulfill the conditions of integrity stated in paragraph 44 b). The convention provides protection for the environment, and supplies the Party with an effective measure for protection. The rationale behind being that the site is best protected in-situ. Currently there are four such sites in Norway; none of these are in the marine sphere.[143] Four new sites are now being assessed. One of these sites is Outer Lofoten,[144] which among other has been suggested because of its special marine environment. The Convention does not lay a duty on the State Parties to propose sites to the list. Therefore, no obligation to protected biodiversity by MPAs can be extracted from the Convention.

Supposing that an area is on the list, does the Convention lay obligations on the State regarding conservation of the area? For a natural property to be included in the World Heritage list, the operational guidelines state that the site "should have adequate long-term legislative, regulatory, institutional or traditional protection."[145] Is the determination what protection should be deemed "adequate" under the State Parties' discretion? This is not clear by the text. But considering the stringent criteria for

[143] UNESCO (2003). The World Heritage List.

[144] Minister of the Environment, (2002)

[145] UNESCO (2002). World Heritage List Operational Guidelines.Section D paragraph 44 litra b vi.

inclusion on the list, and remembering that the adequacy of protection is one of the criteria under the inclusion it is not likely that a site would qualify to the list without protection which the Committee considered to be adequate. Even though there are no explicit requirements of protection level within a designated site these follow indirectly of the selection criteria; resulting in de facto requirements.

3.7 Conclusion

Currently the obligation to utilize protected areas has not come to expression in authoritative conventional text. The general thrust of several international treaties is to place an express obligation on States to use marine resources in a sustainable manner and to preserve the structural and functional integrity of the marine ecosystems. Most references to the use of protected areas come through recommendations and more specialized Conventions. As a consequence the international legal duty to establish marine protected areas is therefore not conclusive.

4 Norwegian legislative provisions

4.1 Introduction

In this chapter, I will focus on which legal instruments are in place today for the protection of marine biodiversity and the establishment of MPAs. My objective is to clarify the specifics of protected areas which may be established in the Norwegian Sea Areas. This has importance both for understanding of the standing of MPA in Norwegian legislation today, and to lay the premises for understanding the possible conflicts with international law that may arise following the establishment of such marine protected areas.

Currently, there is no specific conservation legislation aimed at the marine environment. Accordingly, no pure marine protected areas have been established, but in connection with coastal conservation some sea areas have been protected. The trend in Norway is that the area based conservation is spreading from the terrestrial to the marine environment. Traditionally, Norway has focused on management regimes to ensure a well functioning and healthy marine ecosystem. Present legislation in Norway includes acts both for the protection of wildlife and the conservation of particular areas, focusing on protection of specifically targeted and threatened species or ecosystems, and on extraordinary or beautiful landscapes. Comprehensive legislation with the overall objective of protecting biodiversity as such, has until now not been sought.

The Norwegian Constitution[146] provides for the protection of the environment in art. 110b first paragraph. Every citizen is entitled to a sound and sustainable environment, and natural resources should be exploited in a sustainable manner.[147] The provision

[146] The Constitution of the Kingdom of Norway; as laid down on 17 May 1814 by the Constituent Assembly at Eidsvoll.

[147] Ministry of the Environment (2001)

offers protection for the environment to such an extent the state of the environment is connected with human well being. Clearly, the marine environment is included in the term "environment". Concerning the spatial extent of the Constitution, it is natural to interpret it to have the same geographical applicability as Norwegian jurisdiction. Therefore, Norway is bound, by the Constitution, to preserve productivity and diversity within the outer limit of the EEZ. Section 110b must be regarded as a political statement, which provides for the political premises for a greater political activity on nature conservation issues. The provision does not bestow any right upon the citizens directly. The related question to this is whether section 110b allocates independent or specific duties in relation to the establishment of MPAs for the protection of marine biodiversity, on the legislator, must be answered negative. The section must be viewed to have important interpretative value, when interpreting statutory legislation. It therefore has relevance in the following investigation of subject-matter legislation. In addition, the section may entail a duty of action in favor of the environment. Section 110b (3) can be held to require the Executive to take formal action, in the form of legislation or directive. For the investigation to be undertaken here, this implies that legal grounds for marine protected areas must be sought in statutory law.

4.2 The duty to protect marine biodiversity by use of MPA

The Nature Conservation Act (hereafter the NCA) of 1970,[148] concerns the protection of natural habitats and the wild fauna and flora (the natural environment). Interesting for the present analysis is the question regarding what is, if there is, the obligating element of the NCA. In Section 1 (1) it is stated that the natural environment encompasses "national assets that must be protected." Neither judicial decisions; jurisprudence; or administrative practice suggests that the section is meant to entail a legal duty to conserve the natural environment. It does not imply that all natural environments are protected by law; see the term "must be" instead of "should". Nevertheless, it is considered to have policy value,[149] thus section 1 has relevance when interpreting other acts, and seen together with the Constitution section 110b, it sets limits/conditions for the interpretation and enactment of other legislation.

[148] Act No. 63 of 19 June 1970 Relating to Nature Conservation.

[149] Eckhoff, T. and J. E. Helgesen (2001). chap. 4 and Backer, I. L. (1990). pkt 3.3.

The definition for "nature conservation" also helps clarify what the act is meant to protect the natural environment from; "the need to maintain the qualities of the natural environment for posterity."[150] In conclusion the section states that: "Any disturbance of or intervention in the natural environment should only take place on the basis of long term, all-round management of natural resources, which takes into account the preservation of the natural environment in the future as the basis for human activity, health and well-being."[151] These provisions seen together with paragraph 1, offer the extent of the competence bestowed by the legislator on the executive to protect the natural environment from, by the NCA.

The NCA is applicable within the territorial sea,[152] in accordance with the general geographical applicability of Norwegian legislation, and as a consequence has importance also for the marine "natural environment", thereby providing both a conservation incentive (see section 1 (1) and providing the measures for conservation, section 3.[153] The subject-matter range of the NCA is very broad, the term "wild fauna and flora" in the marine environment, covers both the animals and animal life, including the species protected by the Wildlife Act,[154] as well as fish stocks, corals and benthic species, of any particular environment. The term "flora" includes the plants or plant life of any particular type of environment. In addition, to the NCA the Wildlife act has some relevance to the duty of protecting marine biodiversity. It is, however, only species which enjoy protection and not all marine species fall within the scope of the act. It therefore has minor relevance to my topic; which concerns the biodiversity as a whole.

Wildlife is protected by the Wildlife Act section 2, which also defines the scope of the Act. It understands the term "wildlife" to include "all wild terrestrial mammals and birds, amphibians and reptiles". The Act does not encompass marine mammals, and as

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[150] Nature Conservation Act; Section 1, paragraph 2.

[151] Nature Conservation Act; Section 1, paragraph 4.

[152] The breath of Norway's territorial sea was extended from 4 to 12 nautical miles 2003, Act No. 57 of 27 June 2003, and entry into force is set to be 01.01.2004.

[153] NCA will be further discussed in chapter 3 In connection with the legal framework for establishing MPA nationally and internationally.

[154] Act of 29 May 1981 No. 38 relating to wildlife and wildlife habitats.

follows, whale and seal species fall beyond the scope of the Act. The Act has its greatest practical interest with regard to sea birds. The protection is given a broad geographical scope as it is given applicability in the EEZ. Section 1, "The purpose of the act", paragraph 1, states that the management of "wildlife and the habitats of wildlife" shall enable the productivity of nature and the diversity of species. Section 3 (1) manifests the principle of protection in the first sentence stating: "All wildlife, including eggs, nests and habitats are protected unless otherwise prescribed by statutory law or by administrative decision issued thereof."

The use of the term "habitats" requires some comment; in the Norwegian text the term "bo" is used, this term does not have the same extensive meaning as the English "habitat". The Norwegian "bo" is simply used to signify that the place where the protected animals live and dwell is protected. The legislator did not intend to establish area-protection with this provision, all the time it was clear that the NCA should be the primary normative tool for area conservation. Some birds and amphibians of the marine biodiversity enjoy protection by the Wildlife Act, but that protective provisions which are based on area-conservation must be enacted with competence in the NCA. For the further investigation in this chapter, this entails that the NCA will be in focus, and that other legislation will be examined to the extent that they supplement the NCA in such a way that they provide a stronger protection for marine biodiversity.

4.3 Legislation relevant for establishing MPAs

The NCA is the most important legislation for the protection of vulnerable and valuable biodiversity, through an ecosystem approach. Beyond the 12 mile territorial sea, the authorities have no legislative act which provides for the general area-based protection of the environment. Norway's Territorial sea extends 12 nautical miles from the baseline. The Territorial Sea Act lays the sovereignty within the 12 nautical mile zone.[155] The government asserts the right to establish MPA, within the territorial Sea, and to invoke the necessary restriction within these areas in accordance with domestic legislation. As has been shown in previous chapters there both exists a need for protected areas and an obligation under international law to establish such areas for

[155] Ot.prp. nr 35.p. 10.

Norway within its territorial sea. The doctrine of legality implies that beyond the territorial sea, the establishment of protected areas must be sought in other legislation than the NCA. Here, legislation given for the management of natural resources in the EEZ; like the Sea-water Fisheries Act[156] and the Petroleum Activities Act.[157] In addition, other sector based legislation contains provisions that constitute an important basis for the protection of marine biodiversity. Examples are; The Open Air Recreation Act,[158] The Cultural Heritage Act,[159] The Salmonids and Fresh-water Fish Act,[160] The Pollution Control Act,[161] The Planning and Building Act,[162] Sea-water Fisheries Act,[163] The Economic Zone of Norway Act,[164] The Aquaculture Act,[165]and The Sea-ranching Act.[166] The relevant provisions in these statutory laws it is necessary to take into account to develop a comprehensive understanding of the available protection of biodiversity. In respect to marine protected areas these acts will play a secondary role. The main explanation for that the protective provision is not constructed in a general way. It may therefore only be applicable under a set of circumstances that are not dictated by the goal of protecting and conserving the biodiversity, but rather by the aim to secure the main focus for the sector law. These Acts will to some degree be suitable tools to conserve the given biodiversity against specific threats. They may thus to some degree provide protection. However, they will not be able to provide area conservation as would the NCA.

4.4 MPA established in accordance with the NCA

Designation of protected areas is an executive action, which limits the general freedom of activity for Norwegian citizens. In such instances the doctrine of legality dictates that

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[156] Act of 3 June 1983 no. 40 relating to Sea-water Fisheries, etc.

[157] Act 29 November 1996 No. 72 relating to petroleum activities.

[158] Act of 28 June 1957 No. 16 concerning open-air recreation.

[159] Act of 9 June 1978 No.50 concerning the Cultural Heritage.

[160] Act of 15 May 1992 No. 47 relating to Salmonids and Fresh-water Fish etc.

[161] Act of 13 March 1981 No.6 concerning protection against pollution and concerning waste.

[162] Act of 14 June 1985 No. 77.

[163] supra note 160.

[164] Act of 17 December 1976 relating to the economic zone of Norway.

[165] Act of 14 June 1985 No. 68 relating to aquaculture.

the designation of a protected area must have foundation in statutory law.[167] In the terrestrial realm, difficulties regarding protected areas limiting private owned properties arise. Clearly, the designation of a protected area lays restrictions on future use of the property; the government may be liable for financial loss deriving from such designation.[168] As the State is the owner of the public maritime domain, and may regulate therein any human activity as it pleases, subject to the domestic doctrine of legality and international law. Therefore, no problem of private ownership arises in connection with establishing a MPA. The State can exploit the resources of these areas directly or through concessions that it grants to the public or private bodies or individuals. A different question is if long time use of the marine area may constitute a legal difficulty.[169] Citizens that have customarily utilized areas which are protected by the NCA may be interpreted to be "holder of rights" with regard to the marine territory. If the designation of a protected area results in altered or ended use of an area, the citizens may possibly be successful in an argument that the State must pay compensation in accordance with section 20 (1):

> "…holders of rights to properties which are protected pursuant to sections 8, 9 and 11 are,…, entitled to compensation from the State for financial losses resulting from the decision"

On Norwegian land territory State liability due to area protection affecting exploitative use has several times been presented for the courts. From this it would seem that generally the norm is practiced quite strictly, and it would seem natural that the application on marine use would be practiced even stricter. In conclusion, there are therefore not the same legal difficulties in the establishment of MPAs in which certain activities are prohibited or otherwise regulated.[170] The difficulties that arise in connection with MPAs will therefore predominantly be in the international sphere.

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[166] Act of 21 December 2000 No. 118 relating to sea-ranching.

[167] Bernt, J. F. and Ø. Rasmussen (2003) p. 74.

[168] In relation to the Natural parks this means that the state ownership requirement, section 3 paragraph 1, does not pose any difficulty.

[169] Klemm, C. d. and C. Shine (1993). p. 259.

[170] Ibid.p.259.

Important for the subject-matter competence of the executive is the letter of the act. Does it provide the specific requirements for designation of a protected area? If so, the Executive's discretion is limited. A second question is if the act allows the Government to design and combine the restrictions best suited to fulfill the aim of the protected area or if the restrictions are given by the act. Both these questions will be subject to review below.

The establishment of a protected area within the sea territory[171] is subject to the requirements of the NCA. The NCA was drafted primarily for the protection of the terrestrial natural environment and is therefore not fully adjusted to the marine conditions.[172] For instance the NCA criteria concerning levels of disturbance might not be as appropriate in the marine realm as in the terrestrial realm; the inherent character of the marine environment facilitates the transport and diffusion of i.e. noxious substances, resulting in a disturbance of larger areas than would be normal on land. Differences in media, dimensionality, and scale between marine and terrestrial realms have major implications for marine conservation.[173]

The NCA does not give any guidance on the geographical localization of a protected area. Localization in accordance with NCA is connected with the inherent qualities that are sought protected. The localization of a MPA in accordance with Norwegian legislation is dependent upon; the existence of a parliamentary act providing the executive with competence for establishing protected areas, that the designation of the areas must be in accordance with the given criteria and even though the government has a great deal of discretionary power, the decision is not completely open, and thirdly the limitations set by international public law. The NCA protected areas practical in the marine sphere, are Natural parks, Protected landscapes, Nature reserves and Natural monuments, each have specific requirements to the nature sought to be conserved.

The main purpose of the National Parks is to secure untouched nature for the future generations. The National Parks cover extensive areas, and in this manner they apart

[171] The internal waters and territorial sea.

[172] A review of the travioux prep to the NCA reveal that marine questions were not discussed.

[173]Norse, E. A. (1993). p. 37.

from the other protection types. Another point of difference is that they mainly encompass untouched wild nature without technical installations. There are three alternative requirements that qualify for the establishment of National parks; the first being that the natural habitat is "undisturbed or largely undisturbed" and the second that it is "distinctive" and the third "beautiful".[174] The second of these criteria does not pose great difficulty. Marine areas are usually sought to be protected out of biological characteristics, which are therefore at least biologically "distinct".

The first of these requirements are practical, but some difficulties in relation to marine areas being "undisturbed or largely undisturbed" may arise. Do the criteria imply that the relevant marine areas qualify for protection as National parks? And if not, what makes them fall beyond the scope of the provision? An example is the Lophelia reefs; most reefs have been damaged more or less drastically. It would be difficult to conserve these reefs under the "undisturbed" criterion. The reefs would on the other hand fulfill the "distinctive" requirement, and maybe even the "beautiful" requirement – that is if "beautiful" does not include that the natural habitat actually must be perceivable for humans. Other relevant underwater species non-conservable due to human disturbances are the sponge fields.

Protected landscape is the most moderate conservation form. It is the protection area with the least invasive restriction level compared to the other protected areas designated by the NCA. Section 5 states:

> In order to preserve distinctive or beautiful areas of natural or cultural landscape, areas may be designated as protected landscapes. In a protected landscape, no measures may be initiated which may substantially alter the nature or the character of the landscape.

The second sentence indicates which restriction level is required; measures which "may substantially alter" the nature are prohibited. The content of the requirement is quite vague, and consequently there is room for considerable discretion. Nevertheless it is

[174] The "beautiful" criteria in NCA section 3 has generated an extensive debate in Norwegian jurisprudence, in regard to the authorities discretionary competence and the courts ability to overrule their decision in this regard.

natural to understand the provision as a legal minimum level for protection. Due to the discretionary minimum level, the concrete protection restrictions founded in section 6 has decisive importance for the actual restriction content. The "substantially" criteria can be found in most restrictions, given in accordance with section 6. Because of the central position the aim of conservation of landscape-pictures in landscape conservation has, this purpose must be given substantial importance. Therefore it has been assumed that this protection category for pure marine areas (areas without visible terrestrial connection), normally should be excluded.

Next, is the establishment of Nature reserves, in accordance with the NCA section 8 which states:

> "Areas where the natural environment is undisturbed or largely undisturbed or of a special type, and which are of special scientific or educational interest or which stand out because of their distinctive character, may be protected and preserved as nature reserves. An area may be totally protected or protected for specific purposes as a forest reserve, mire reserve, bird reserve or the like."

The area in question must be a natural environment that is either "undisturbed or largely undisturbed" or "of a special type"[175], in addition the area must have either a "special scientific or educational interest" or be areas "which may stand out because of their distinctive character". What is interesting here, is what requirements come in addition to the national park criterion. NCA Section 9 states:

> "In areas of particular importance for plants or animals which are protected and preserved pursuant to section 13 and 14, development, construction, pollution and other disturbance may be prohibited to preserve their habitat.
>
> The same applies to plant or animal habitats which are or will be protected by or pursuant to other legislation"

In accordance with this provision, biotope conservation is possible when the area in question has an important function for protected plants or animals. The deciding criteria in section 9 are that the plants or animals are protected by legislation; it is of no importance by which legislation protection is offered. Such a "biotope" nature reserve

[175] Rt 1995 s. 1427 (1432).

may in this context be established even though the criteria in section 8 are not fulfilled. This is for example practical in those instances where the habitat may not be deemed as "undisturbed or largely undisturbed"; as the same time that it does not display an area "of a special type". Biotope protection similar to the one offered in NCA section 9 can be found in Wildlife Conservation Act section 7[176] and The Salmonids and Fresh-water Fish Act[177] section 4.[178] For the purpose of the general protection of marine biodiversity these provision do not have much practical significance, but The Salmonids and Fresh-water Fish Act section 4 has been used to protect reefs.

If an area is considered to fulfill the criteria in both section 8 and section 9, the Government has stated that the choice of protective regime must be in coherence with the conservation aim. [179]A nature reserve, after section 8, would be the best choice if the aim of the protection is to protect a complete, near untouched ecosystem. Is, on the other hand, the aim more related to species conservation protection under the Wildlife Act combined with biotope protection, section 9 would be more practical. Section 9 enables protection in areas with more human activities than in a nature reserve, because there is no requirement that the nature is "untouched" after section 9. This type of protection would, for instance, be quite suitable for conserving a sea bird locality. [180]

The third category of protected area currently available by Norwegian legislation is the Natural monument, section 11. Section 11 reveals is not frequently used for other purposes than spot single feature conservation, and has only in a few cases been utilized to protect larger areas. This practice suggests that other conservation categories are given supremacy in connection with area conservation. Section 11 (1) provides:

> "Geological formations and botanical or zoological features which are of scientific or historical interest or distinctive may be protected and preserved as natural monuments."

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[176] The Wildlife Act 1981.

[177] Act No. 47 of 15 May 1992 relating to salmoinds and fresh-water fish etc.

[178] "Anadromous salmonides are protected unless otherwise determined in provisions set out in or issued pursuant to this Act.".

[179] Report to the Storting No.43 (1998-99) pkt. 5.6.

[180] Ibid.

A coral reef clearly fulfills the first criteria "geological formation", but also has both botanical and zoological features. Secondly: the area or subject of interest must fulfill one of three additional criteria; it must have "scientific interest", "historical interest" or be "distinctive". The Lophelia reefs must also be considered to fulfill these criteria; "scientific" since they are recently discovered and the mapping of the biological diversity connected to the reefs have just begun, and there is still much uncertainty concerning the functions of the dependent ecosystems. In addition the reefs arguably have "historical" interest; seeing that the reefs are many thousands year old. A national monument differs from the other protected areas in the NCA, in that that it is not actually a protected area. Rather section 11 provides for an "object" protection. Section 11 only provides for protection of the object as such. But in many instances successful protection of an object also requires some regulation of surrounding areas. Paragraph 2 states:

> "The area around such a formation or feature may be designated as part of the natural monument if this is considered necessary for its protection"

This is interesting because the provision provides the competence for establishing a "buffer" zone. Neither the provision concerning the National park nor natural reserves opens directly for such a buffer zone. This may partly be attributed to the fact that a natural monument has a very limited geographical scope and, thus the protection would be an illusion if the possibility of establishing a buffer zone did not exist.

I have investigated the creation of MPA in accordance with the NCA. The next relevant question is what types of restrictions of human activity within the protected area.

4.5 Restrictions set within the protected areas

The restrictions in a protected area may either be given by the provision providing for the establishment of the MPA, or the substance of the particular restriction may be left to the administrations discretion.[181] In a report the Norwegian government gives examples of measures implemented in the marine protected areas: trawl-free zones in

respect of fishing and trawling for sea weed, areas closed to drilling for oil for parts of the year and areas protected under the terms of the Nature Conservation Act.[182] The Act provides for MPAs which are based on the corresponding system for terrestrial management, and then particularly the practice of zoning.[183]

The NCA states that the starting point for the restriction level in the National parks:

> "shall be protected against development, construction, pollution and other disturbance"[184]

The marine biodiversity is subject to such protection since it includes "The landscape and the flora, fauna, natural features,…".[185] So in the case of National parks the government is required to provide a restriction level that at least fulfills the criteria set out in NCA section 3. Protected landscapes, section 5, states that the restriction level ensure that there must activities which may alter the landscape's nature or characteristics. In regard to the nature reserve section 8, an area may be totally protected or protected for specific purposes. By "totally protected" is understood the prohibition of all human activity, the lesser "protected for specific purposes" Section 9 provides specifically for nature reserves established in areas of particular interest for plants or animals and states that restrictions including prohibition of "development, construction, pollution and other disturbance" may be enacted to preserve their habitat. This is interesting for the protection of biodiversity, since it opens for great restrictions on human activity.

Neither the provision regarding National parks, protected landscapes, nor nature reserves suggested the use of safety zones in the continuance of the protected area, as does the provision regarding Natural monuments.[186] It is possible to combine these protection categories within a desired area in such a manner that they fulfill the core- and buffer zone functions.

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[181] NCA sections 4, 10 and 12.

[182] Report to the Storting No. 12 (2001-2002).

[183] The Nature Conservation Act will be further investigated in Chapter.

[184] NCA section 3 para 2.

[185] NCA section 3 para 2.

[186] NCA section 11 para 2.

Section 22 gives the Government the authority to prohibit "any passage or traffic throughout the year of part of the year if it is considered to be necessary to preserve the flora and the fauna or geological formations" in natural reserves, natural monuments and areas to which prohibitions pursuant to section 9 apply. Passage and traffic here includes both motorized and non-motorized passage. Marine navigation is included, as well as aviation.[187] As discussed in earlier chapters, vessel navigation represents a threat to the marine biodiversity. The King may also implement restriction that are less obtrusive that total prohibition of traffic and passage.[188] In national parks "the King may in the same way prohibit motor traffic and may also, within further delimited areas, regulate any other passage or traffic if so required in the interests of the natural environment…" As the National parks are both established to protect the environment and to benefit human recreation, the Kings has narrower authority to prohibit passage in the national parks. This would imply that in a marine national park the government could restrict commercial traffic, but not recreational traffic. Does the provision in section 22 provide the Government with sufficient competence with regard to the need in to regulate passage and traffic in the marine realm?

Norwegian legislation, and thus, MPAs established in accordance with such, may be enforced on Norwegian nationals. Norwegian nationals must submit to legal provisions given in both the territorial waters and the EEZ, as long as the statute providing the restriction is given geographical applicability. Ships flying the Norwegian flag are obliged as Norwegian nationals. The NCA section 24 concerns the penal liability for the willful or negligent contravention of any prohibition issued pursuant to the act. The penal liability is either a fine or imprisonment.[189] Within the territorial sea all ships are obliged to comply with Norwegian provisions, as long as the provisions do not infringe on the right of innocent passage.[190] These issues will be further analyzed in chapter 5.

[187] Norsk Lovkommentar (2003)

[188] From the more to the less.

[189] "…is liable to a fine or imprisonment for a term not exceeding one year. Under particularly…".

[190] UNCLOS Articleicle 2 and art. 17.

4.6 Evaluation of Norwegian legislation in regard to the international obligations concerning MPA

The current system's legal basis for establishing marine protected areas in the Norwegian seas, is based on the utilization of the existing Nature Conservation Act, and the there available protective measures. The preparatory documents to the NCA are surprisingly silent in regard to the marine environment. This suggests that the conservations measures in the act are designed predominantly for terrestrial nature conservation. To date there has been no modification of this act as to provide a specific provision for the establishment of marine protected areas, or to amend the existing provisions as to better adjust to the marine circumstances. Nor has the act been amended to provide protection for biodiversity.[191] There is therefore a "passive" transformation of traditional land based conservation legislation on -marine issues. In White Paper 43 (1998-1999), the Government refers to the protection measures available by the NCA, and states that these are also applicable in marine areas. The paper emphasizes in the continuance that these measures are of a general nature and not especially tailored for marine protection. The government, however, states that it will review the currently available measures and consider suggesting a measure specific for protection of marine areas.[192] The passive application and transformation of the terrestrial-developed conservation regime in the NCA on marine areas; raises questions in regard to the aptness of these measures in the marine environment. The first question is whether the criteria set to the natural environment in the Act fully encompasses the biological and environmental values sought conserved in the marine areas. For instance, it is uncertain, how the differences of the interplay patterns between biological diversity levels and the marine environment necessitates different criteria for the election of areas. The second question is if the NCA measures and categories per se are sufficient considering the vast difference in the characteristics of marine and land environment. This is a question regarding the aptness of the conservation categories set out by the NCA. The threats present in Norwegian Sea areas are similar to terrestrial dangers: pollution, habitat destruction and over-exploitation. The fundamental dissimilarity of the marine environments inherent qualities suggest that the categories must at least be

[191] Ministry of the Environment (2001)

[192] Report to the Storting No.43 (1998-99) pkt. 5.6.

reviewed to cover these differences, to be satisfy the conservation goals set out by international and domestic obligations.

Parts of the marine environment and biodiversity are regulated by fishery and petroleum legislation, which are applicable in the EEZ as well, but otherwise the marine biodiversity situated beyond the territorial sea lacks protection. The result is an undesirable discrepancy between management legislation and conservation legislation, ending in among other; that the Lophelia corals and partially fall outside the jurisdictional scope of the NCA. It has been articulated from NGOs that future legislation concerning the protection of biodiversity should be applicable within the limits of the EEZ.[193]

[193] WWF (2003).

PART III. UNCLOS LIMITATIONS ON THE MPA – THE SCOPE OF NORWEGIAN ENVIRONMENTAL JURISDICTION

In Part II the discussion of the Norwegian legal framework for establishing MPAs was conducted without regard to limitations that may follow from UNCLOS or other international provisions. The question raised in this Part is whether all protective measures given in accord with Norwegian legislation are concurrent with the present law of the sea. Further, I will examine where discrepancies do or may appear. Under investigation is the interface between the national MPAs and the rights given to all states on the oceans by UNCLOS. The first problem to be discussed is what rights are given to all states according to UNCLOS? The second question is whether UNCLOS itself supports the creation of MPA in the manner that recently has become commonplace. Should this be the case, supporters of the MPA could argue that the legal content of other states rights have been modified to allow certain types of MPAs. The coastal States right to establish MPAs will be examined within the regime of the territorial sea (chapter 5), within the exclusive economic zone (chapter 6) and lastly on the continental shelf beyond the 200 mile zone (chapter 7).

5 Norwegian jurisdiction in the Territorial Sea

5.1 The territorial sea and coastal State sovereignty

UNCLOS establishes the regime of the territorial sea. The concept of the territorial sea entails that all coastal States claim to exercise sovereignty, subject to treaty and rules of general international law, over an adjacent belt of sea. This belt is described as the "territorial sea" in art. 2, Part II UNCLOS. The width of the territorial sea is provided by art. 3; it may not exceed 12 nautical miles. In the territorial sea the coastal State enjoys sovereignty,[194] and with it the power to apply national law. The coastal State's rights to regulate environmental protection in territorial waters has been assumed and asserted in national legislation, and in treaties on such matters as dumping or pollution from ships.

Norway asserts its right to apply national environmental legislation within the territorial sea. This follows directly from Norwegian sovereignty over the area, and subsequently by the Territorial Sea Act[195] and by the geographical application of the NCA.

5.2 The right of innocent passage

The regime of the territorial sea sets important limitations on the coastal State's jurisdiction with regard to environmental matters; it must not hamper the right to innocent passage of foreign vessels through the territorial sea.[196] The implications of this limitation on Norway's jurisdiction will be subject for my further investigation. The limitations to sovereignty must be viewed in light of the role of sea transport in international trade. Shipping is the most important inclusive interest of the world

[194] UNCLOS art. 2(1).

[195] Act No. 57 of 27 June 2003.

[196] Birnie, P. W. and A. E. Boyle (2002).p. 370-371.

community, and the most important among the various uses of the sea.[197] Ghosh describes the world community's interest in the use of the territorial of different States to be:

> "not only unavoidable by international shipping, but is in the interest of the community of states. Otherwise, transportation costs would unnecessarily increase and along with them the prices of commodities. Hence, for efficient and economical transportation of goods, expeditious use of the territorial sea by international shipping is imperative. The pattern of modern shipping has, moreover, made an incidence of avoidable detour – and for that matter avoidable delay- by ships doubly unacceptable, because giant ships are extremely expensive to operate."[198]

The protection and preservation of the marine environment has a fundamental status within UNCLOS. These considerations must be duly taken into account when investigating closer the attributes of the limitations on Norway's jurisdiction to establish marine protected areas within the territorial sea. UNCLOS part II section 3 deals with innocent passage in the territorial sea. A closer evaluation of "innocent" is of interest because some passage within a special vulnerable or biodiversity rich area may be considered to be inherently "non-innocent".

The function of the law of the sea has been to reconcile the exclusive interest of the coastal States and the inclusive interests of the international community in the territorial sea. In this attempt at reconciliation, the concept of "right to innocent passage" has been the key element.[199] The rule of innocent passage is stated in art. 17. This right is enjoyed by the vessels of all nations. It is an essential safeguard for freedom of maritime navigation. Foreign vessels do not acquire exemption from coastal State laws. Legislation must be in conformity with international law, and must not have the practical effect of denying passage. The limitation of the coastal State's jurisdiction in respect to hampering of international shipping is stated in UNCLOS.[200] Consequently,

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[197] Ghosh, S. (2001). p. 38.

[198] Ibid. p.39.

[199] Ibid.

[200] The limitations are reflected in the Territorial Sea Act section 2(2).

the point of departure is that MPAs which in effect hamper international shipping are not in accordance with international public law.[201]

Should the coastal State establish a MPA which lays serious restrictions or altogether bans navigation within an area, other States may invoke their right to innocent passage. To this, the coastal State has three main argumentative tracks. Firstly, the State may argue that all passage within a given area is not "innocent". Secondly, it is arguable that some vessels, according to their inherent damage potential, may not engage in "innocent passage". Thirdly, even if passage is deemed "innocent" and the limitations on coastal State jurisdiction come into effect, the coastal State may invoke that jurisdiction to regulate the innocent passage follows by the exceptions stated in art. 21 and art. 22.[202]

5.2.1 May environmentally detrimental passage be "non-innocent"?

I will now investigate the validity of the coastal State's argument that the passage *per se,* within a certain geographical area or because of certain qualities of the ships or cargo, cannot be considered "innocent". The consequence of this argument is that the limitation of coastal State jurisdiction does not come into effect; the protected areas have a legitimate basis. The question is: may "innocent passage" be interpreted, with consideration to the general obligation to protect and preserve the marine environment, in such a manner that passage, which is detrimental to biodiversity within an area, could constitute an independent argument sufficient to exclude passage from being innocent?

Art. 19 goes beyond providing that "passage" shall be deemed to be "innocent" as long as the same is not prejudicial to the coastal States "peace, good order or security". Art. 19(2) provides a system of tests for judging objectively whether particular activities are or are not "innocent". The list of activities incompatible with "innocent passage" is exhaustive. It does not seem to lend credence to the possibility of abuse by the coastal State in determining "innocence" of passage. The scope of coastal State's discretion has

[201] As seen in section 2.3 also non shipping related restrictions are sought in marine protected areas. Such rstrictions can have a legal basis in the NCA, see section 4.5.

[202] Art. 21 concerns "Laws and regulations of the coastal State relating to innocent passage", art.22 "Sea lanes and traffic separation schemes in the territorial sea".

been reduced to a minimum. In relation to this provision Burke[203] has held that even though art. 19 permits "some minor discretion" by the coastal State, this discretion does not pose "any overwhelming difficulty" for the effective management of the oceans. Art. 19(2) encompasses activities which are deemed to be detrimental to coastal security, economic interest and environmental protection.

Art. 19(2) (a) states that passage is not innocent if the vessel engages in an activity that poses "any threat or use of force against the… territorial integrity…of the coastal State". The coastal State may argue that a large vessel traversing close to the coast represents a threat to its territorial integrity. A textual interpretation of the term "territorial" draws associations to an area of, or pertaining to landed property. Alternatively, the term could be naturally linked to the territorial sea, and therefore include the areas within it. "Integrity" may be defined as the condition of having no part or element taken away or wanting; undivided or unbroken state; material wholeness, completeness, entirety. As a consequence of the above interpretation, "territorial integrity" should cover the marine environment, and therefore the habitat to marine biodiversity. It could be in accordance with the letter of the provision to consider passage that represents a threat to a marine habitat protected to fall under the scope of litra (a), opening for the use of this provision as basis for the creation of MPAs which restrict navigation. This result is quite liberal in regard to the scope of the coastal State's environmental jurisdiction.

An interesting question is if the drafters of the provision intended for litra a to be so interpreted. A closer interpretation of the provision is necessary. To stretch the provision to include threats to the marine environment does not immediately appear in coherence with the context in, or the purpose of the provision. It is more obvious to interpret the provision to be a consequence of the principle iterated in the Charter of the United Nations art. 1 (4.)[204] Another interpretation is that it does not cover situations other than where the criteria "force" is fulfilled. This interpretation is further supported

[203] Burke, W. T. (1975).p.276.

[204] The UN Charter (1945) art.1 (4): "All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the purposes of the United Nations."

by that environmental objectives are sought protected in other litra, and that reading the provision as a whole, each litra seems to have different subject matter objectives. My conclusion is that an interpretation of the (a) which widens the scope beyond the "force" criteria can not be valid, thus environmental considerations cannot be argued under this provision.

The provision 19(2) (h) regards "any act of willful and serious pollution contrary to this Convention". The mentioned activity entails that passage could be deemed as non-innocent. The nature of the activity makes it of special importance to marine biodiversity, seeing that the disastrous effects of serious pollution. The activity may not be very relevant to the jurisdictional issues examined here, because of the subjective condition "willful". This condition implies that the act already has occurred, and that the consequence of the activity will be that the coastal State may act towards that specific vessel. The provision does not appear to have pre-activity value. Other sources of interpretation of this provision might alter the strict time-criteria, resulting that also passage where pollution has not yet taken place, but where the probability for pollution must be considered to be high, or the effects of pollution must be considered to be very detrimental are taken into consideration. Both criteria, "willful" and "serious", must be fulfilled for the activity to be regarded as prejudicial to the peace, good order or security to the coastal State. This provision does not appear to have relevance in the further discussion.

Finally, I will investigate the activities in litra (i) "any fishing activities". As above under (h) the focus is on activities that have already taken place. Within the territorial sea the coastal State enjoys full sovereignty over the natural resources, and may enact those fishery related provisions it sees necessary. This provision cannot be used to legitimize a general restriction on passage within a MPA, by ways of defining the passage not innocent.

While considering art. 19(2) it is essential to remember that the right to innocent passage is given preference in the territorial sea. The activities that are deemed to be non-innocent must be interpreted with due caution and regard to the exhaustive nature the drafters achieve. This said it is important to emphasize that the application of the

provision must be put in a practical and current context. Today, in Norwegian Sea areas, there are no MPAs within the territorial sea where a total ban of navigation is prescribed. It is, nevertheless, not unlikely that future protected areas will include such restriction, as the inherent threat of vessels in vulnerable areas is apparent. The coastal State may wish to regulate and monitor passage within an area closely, and thus define which vessels and activities are not regarded to be innocent. In allowing this there is an evident danger that some coastal States might abuse this possibility to make regulations in their territorial sea, which are not in accordance with the basic principles of the Convention, i.e. by creating large protected areas and defining all commercial passage as a threat to the territorial integrity. The right to deny passage has arisen in the form of nuclear-powered ships and ships carrying hazardous cargoes. Some States regard these vessels as inherently threatening to their peace and good order, and consequently not entitled to innocent passage.[205]

My conclusion to the discussion above is that none of the litra of art. 19(2) provide for the coastal States argumentation for to define passage as non-innocent from the consideration of the protection of marine biodiversity. Mainly, this is because of the precise and exhaustive formulation of the activities deemed to be prejudicial to "the peace, good order or security" of the coastal State, and therefore not qualified for innocent passage, the provision must be treated with due respect. UNCLOS explicitly provides for coastal State jurisdiction relating to innocent passage in art. 21, and must therefore be regarded as the main legal instrument for modifying or banning innocent passage in the territorial sea.

5.3 Exceptions to the right of innocent passage

5.3.1 Introduction

The exceptions in art. 21 and art 22 are the basis for the coastal States jurisdiction to regulate navigation in the marine territory for the purpose of protecting and conserving marine biodiversity. In this section I will examine the concrete jurisdictional questions which arise when a coastal State seeks to establish a MPA with the restrictions outlined

[205] Churchill, R. and A. V. Lowe (1999), p. 91.

in section 2.3 above. As discussed in chapter 2, the designation of a protected area in itself does not lay restrictions on human activity, but rather the subsequent restrictions which are detailed designed for each area. The main restrictions here investigated will be: the ban of navigation, the restriction of certain cargo vessels, including the towing of ships for construction, and the designation of sea lanes.

5.3.2 Art. 21(1) and the establishment of marine protected areas

Art. 21(1) spells out in great detail the matters the coastal State is entitled to make laws and regulations relating to innocent passage. Art. 21 can be said to be reciprocal to the stipulations of art. 19; the latter mentions clearly what would not be permissible to foreign ships while in "passage" through the territorial sea, the former clearly specifies the limits beyond which the coastal State would not be entitled to exercise its power of regulation. Art. 21 "Laws and regulations of the coastal State relating to innocent passage" provides in (1):

> "The coastal State may adopt laws and regulations, in conformity with the provisions of the Convention and other rules of international law relating to innocent passage through the territorial sea, in respect to any of the following:[206]
> (a) the safety of navigation and the regulation of maritime traffic;
> (d) the conservation of the living resources of the sea;
> (f) the preservation of the environment of the coastal State and the prevention, reduction and control of pollution thereof;"

The background for the exceptions art. 21 is the necessity for coastal States to be able to cope with modern technological realities; as a consequence they were empowered by UNCLOS to make certain laws and regulations. In the following, I will undertake to examine the three relevant situations where the coastal State may adopt regulations in relation to innocent passage.

In litra (a) the coastal States are given regulatory jurisdiction over the safety of navigation and the regulation of maritime traffic. My question is: can this provision be useful for the implementation of restrictions with regard limiting innocent passage in a MPA? There are two independent criteria for legitimate regulation in litra (a) "safety of

navigation" and "regulation of maritime traffic". Common is the subject matter; namely vessels in passage. A textual interpretation of the criteria "safety of navigation" can lead to the conclusion that the subject of interest is the action or practice of traveling on water in a ship or other vessel; and that issues concerned with other than the vessels *per se* are not relevant. Such a narrow and limited interpretation of the term can, however, not be sufficient. The concept of "safety of navigation" may also indicate a much wider scope; included must also be the possible effects on the surroundings, including adverse effects on the marine environment and coast. In my opinion, it would be unnatural to completely distinguish safety of navigation from vessels activities. The logical application of this norm seems to be that in addition to "pure" on board safety issues, both issues relating to the inherent characteristics of the maritime areas in which the vessel is navigating and issues relating the possible damages a vessel could produce if out of course or in distress could fall within the scope of the consideration of "safety of navigation". The purpose of the provision becomes clear when it is read in context with the other litra in art. 21; each litra has different subject matter. Since litra f explicitly regards protection of the environment, it is possible to argue that an interpretation of (d) which includes considerations from other litra is not valid.

The second criteria in (a) is the "regulation of maritime traffic". Clearly, this norm concerns vessels in passage, and more specifically to the transportation of merchandise for the purpose of trade. How does this criterion relate to the right of innocent passage? An interpretation of the systematic construction of the right to innocent passage that said "regulation of maritime traffic" the result must be that it does not include the denial of passage, but only the rerouting and other restrictions in relation with the traffic aspect of navigation. Such a possibility has relevance in those instances that the coastal State whishes to implement a core zone, in which navigation is prohibited and a buffer zone where navigation is subject to predetermined routes. In Norway, this may be done by establishing a nature reserve as a core area, and a surrounding natural park where there traffic provisions are given.

Should the above discussed criteria of litra (a) must be viewed in connection, in such a manner that they must be considered as accumulative. If so, the consequence must be

[206] Only litra that are relevant for my objective are included.

that the possibility to widen the scope of "navigational safety" must be somewhat narrowed, since it could seem that "regulation of maritime traffic" serves as a means to provide safety. So interpreted, the closeness to the vessels in question is strengthened, possibly with the result that a more dynamic view of "safety of navigation" would be zealous with regard to the drafter's intention.

In conclusion, litra (a) reflects a basic concept incorporated throughout the Convention, the primacy of global maritime navigation. I have argued for that environmental considerations can by interpreted to fall within the letter of the provision. However, read in context the provision does not appear to be intended such use. On this basis I conclude that restrictions which due to a conservation aim impede innocent passage, can not find basis in litra (a).

In litra (d) the coastal State is given jurisdiction to regulate over the conservation of the living resources of the sea. In connection with MPAs established to conserve the marine biodiversity, this provision appears to be well suited.

There is a question regarding the content of the term "living resources" compared to the term "biodiversity". Are they interchangeable in this specific provision? At the species level, the two concepts are interchangeable. As earlier discussed, the term biodiversity encompasses more than species diversity.[207] It is more difficult to conform ecosystem- and genetic- diversity to living resources from a textual interpretation of the terms. As defined earlier the "marine environment" in the general obligation in art. 192 includes the concept of biodiversity.[208] The term "living resources" has a more limited content, but given that the Convention only operates with these categories it is natural to consider other biodiversity that species diversity as "living resources". My question is if the utilization of the term "resources" in any ways excludes parts of marine biodiversity. The term "resource" is commonly understood as a natural source of wealth or revenue or as a means of its economic value remains yet undiscovered. Should the term be so interpreted the coastal State's sovereign rights are in practice are so great that little remains for the other States. This would not be in line with the general

[207] See sub-section 1.3.1.

[208] Ibid.

purpose of the regime. The first textual interpretation of the term as a source of economic value is further supported by the fact that had the drafters sought to provide the coastal State with sovereign rights to conserve and manage marine biodiversity without limitations,[209] the drafters could have chosen a different wording. Then again, a more precise wording may be complicated to achieve in an international negotiation setting. The opposite term "non-living resources" typically refers to hydro-carbon and gas, and geological resources. With these limitations the coastal State is given jurisdiction to regulate over the conservation of biodiversity.[210]

An interesting problem is the question of which restrictions, and at what level, may be enacted in accordance with litra d within a MPA. Can all restrictions drawn up in section 2.3 be enacted by the coastal State, regardless of the right of innocent passage? The objective of the Convention, the balance of interest in the territorial sea, entails that an interpretation which has an unbalanced result in disfavor of the rights bestowed on the States, cannot be in accordance with the Convention. Where the boundaries should be drawn is a difficult evaluation. Possibly it may not be answered at a general level. To extract general standards from the provision and the UNCLOS system would rest on weak legal foundation. One must appreciate that the MPA, and connected restriction, do not have that clear foundation in the Convention, and consequently the method and norms for the weighing of the coastal State's right to MPA and other State's rights in this area are not clear. However, some guidelines can be found in the Convention which may be useful when determining the allowable restrictions on a case to case basis. The general provisions in Part XII constitute an important backdrop, as well as the general statements in the Preamble. In addition, consideration the developments in international environmental law since the drafting of UNCLOS must be taken. Especially the environmental treaties which have gained widespread acceptance must be given due consideration. The CBD is relevant in this relation, and even though it is subsidiary to UNCLOS, it provides important arguments and agreements in regard to the protection

[209] In coherence with the general obligation in art. 192.

[210] 1(d) and (e) can be viewed together, they relate to the obligation under Part V and Part VII to conserve and manage the lining resources in the EEZ. In this regard (e) forms the starting point for coastal State rights to the living resources in the EEZ. (d) and (e) are the starting point for a wider pattern of coastal State enforcement powers with regard to living resources under their jurisdiction.

of the marine biodiversity. In conclusion, I consider a broad interpretation of the provision, which permits the establish MPAs for the protection of marine biodiversity of the jurisdiction based on in seem without foundation.

The coastal State is endowed the power to pass legislation regarding the preservation of the environment of the coastal State and the prevention, reduction and control of pollution thereof in litra f. I will discuss the two components first separately, and then in view of each other.

The formulation of the first component, “the preservation of the environment of the coastal State” at first draws the textual interpretation to the conclusion that the relevant “environment” here is the terrestrial land environment. Above, I have argued for that areas within the territorial sea must naturally fall within the scope of the term “environment of the coastal State”. As a result, litra (f) includes the marine environment. Isolated, this component provides the coastal State with jurisdiction to pass legislation impeding innocent passage in marine protected areas.

The second component, “the prevention, reduction and control of pollution thereof”, gives legitimacy to restriction with the purpose of protecting the marine environment from pollution. In relation to pollution from vessels art. 211(4) states:

> “Coastal States may, in the exercise of their sovereignty within their territorial sea, adopt laws and regulations for the prevention, reduction and control of marine pollution from foreign vessels, including vessels exercising the right of innocent passage. Such laws and regulations shall, in accordance with Part II, section 3, not hamper innocent passage of foreign vessels.”

The provision opens for a very wide coastal State legislative jurisdiction. A textual interpretation suggests that the coastal State may choose which restrictive measure it deems most appropriate.

Next, the issue concerning the correlation of the two components arises: does the specification of pollution in the second component signify that the preservation of the marine environment in the first component is only with regard to pollution? Does the

context that the very general first component is set in, limit its scope? The problem is if the components be regarded to be accumulative or complementary?

Other States may argue that since pollution is explicitly regulated while other threats are not, it would represent an unjustified expansion of Conventions scope to view the components as alternative and independent. Convexly, it may be argued that the mere fact that the provision is divided in two components is strongest argument for the interpretation of the two as separate normative provisions. Either way, considering the emerging principles of international environmental law, there is little credence in a strict interpretation of the provision as a whole to exclude other threats to the marine environment than pollution. Article 21(1)1(f) is linked to art.192, which formulates the general obligation to protect and preserve the marine environment. It is also linked to art. 194, which sets out the obligation of States to prevent, reduce and control pollution of the marine environment from "activities under their jurisdiction" and in "areas where they exercise sovereign rights".

Restriction on navigation directly connected and traditionally used against pollution have solid basis in the provision. It is possible that the coastal State whishes to implement other and more distant restrictions; for instance the closure of passage in an areas which represent a distinct biological community. The coastal State rationale for this measure may be a precautionary approach to accidental pollution, which rests on the logic that the exclusion of vessels in navigation effectively eliminates an important threat of pollution and to biodiversity. Other States may argue, that the coastal State already is equipped with jurisdiction that effectively eliminates all forms for operational and willful pollution, and dumping, and that precautionary measures as describes are unnecessary, and furthermore do not have foundation in the Convention.

Common for the situations explored above are that coastal States right to enact and enforce measures under art. 21(1) is qualified. The right under art. 21(1), cannot concern "to the design, construction, manning or equipment of foreign ships unless they are giving effect to generally accepted international rules or standards".[211] This provision has the desired effect of sparing ships in international routes the problem of

[211] Art. 21(2).

meeting varying requirements of individual coastal States. At the same time, incompetence of coastal States to control matters intimately connected with vessel-source hazards may not be wholly desirable.[212] Regulations in accordance with art. 21 must be duly publicized,[213] and must be non-discriminatory.[214]

5.3.3 Art. 22 and the establishment of marine protected areas

UNCLOS art. 22 empowers the coastal State to designate sea lanes and prescribe traffic separation schemes in order to regulate the innocent passage through the territorial sea. The relevant question for my investigation is if this provision be used to lead traffic around MPAs?

Action may be taken "where necessary having due regard to the safety of navigation," taking into account certain factors, including the recommendations of the competent international organization.[215]All ships may be required to use such lanes and traffic separation schemes, in particular "tankers, nuclear-powered ships and ships carrying nuclear or other inherently dangerous or noxious materials." The existence of sea lanes and traffic separation schemes are to be indicated on charts, and given due publicity by the coastal State.

The establishment of sea lanes and traffic separation schemes serves to promote the safety of navigation. Are environmental concerns relevant under the provision? The typical use of sea lanes and traffic separation schemes occurs in areas "where density of traffic is great or where the freedom of movement of shipping is inhibited by restricted sea-room, the existence of obstructions to navigation, limited depths or unfavorable meteorological conditions."[216] None of these type-situations are "environmental" by nature. Together with an ordinary interpretation of the text of the provision this indicates that it is not meant to provide environmental jurisdiction.

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[212] Ghosh, S. (2001).

[213] Art. 21(3).

[214] Art. 24.

[215]The international Maritime organization. Herafter: IMO.

Art. 22 (2) states that:

> "in particular…" ships carrying "…other inherently dangerous substances or materials may be required to confine their passage to such sea lanes."

The purpose of this section must be to empower the coastal State to confine environmentally threatening vessels to designated lanes, seeking to prevent pollution disastrous by ship wrecks. Furthermore, the text is not confined to "pollution", and therefore an interpretation might allow applying restrictions also to vessels which may pose other threats; i.e. physical alteration by impact. In Norway, the towing of outdated nuclear submarines have raised concern, but also other ships may be hazardous should they sink in the territorial sea. Should the above interpretation indicate the scope of the provision, it may be an effective way for the coastal State to reroute ships towing condemned ships.

5.4 Conclusion

UNCLOS does not explicitly provide for the establishment of coastal State MPAs within the Territorial sea. The analysis in this chapter reveals that legal foundation for such MPAs may be found in several provisions. The coastal States jurisdiction to establish MPA within the territorial sea is wide, but as demonstrated the restriction set in these areas are subject to the other States rights; which is predominantly the right to innocent passage. But in certain cases innocent passage may be regulated due to environmental concern.

[216] Bernhardt, R. (1989).

6 Norwegian jurisdiction in the EEZ

6.1 Introduction

The regime of the exclusive economic zone is set forth in UNCLOS part V. It is a separate functional zone, situated between the territorial sea and the high seas. The EEZ lays beyond and adjacent to the territorial sea (art. 55), and shall not extend beyond 200 nautical miles from the baseline from which the breath of the territorial sea is measured (art. 57). As with the territorial sea, the establishment of the zone must be declared. Norway declared an exclusive economic zone by law 17 December 1976, which entered into force 1. January 1977.[217] The EEZ is a "specific legal regime" under the Convention art. 55:

> "under which the rights and jurisdiction of the coastal State and the rights and freedoms of other States are governed by the relevant provisions of this Convention"

There are three fundamental elements that constitute the specific legal character of the EEZ: the rights and duties UNCLOS accords to the coastal state (art. 56), the rights and duties which the convention accords to other states (art. 58), and lastly, the formula provided by the Convention's art. 59 for regulating activities which do not fall within either of the two previous categories. Art. 56 contains the core of the concept of the exclusive economic zone, and viewed together with art. 58, and art. 59 describes the "specific legal regime" set out in art. 55.

For the rights and duties on the continental shelf within the 200-mile zone the continental shelf regime and the EEZ regime coexist. Consequently, the provisions in Part VI are applicable, and supplement the regime of the EEZ.[218]

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[217] Act of 17 December 1976 relating to the economic zone of Norway.

[218] Art. 76(1) and art 77. See also chapter 7.

In the Norwegian Sea areas, the Advisory group has recommended the establishment of four protected areas in the EEZ.[219] A premise for this question is the establishment of MPAs in which human activity is sought regulated by the coastal State. The key question in this chapter is: how does the coastal State have the right to establish a MPA in the EEZ?

Previously, I have shown that the effects caused by shipping and submarine structures are grave. The regulation of these activities within a MPA would undoubtedly strengthen the conservation of marine biodiversity, especially since these two human activities contribute, either directly or indirectly, to the main threats in the EEZ. In this chapter I will review the correlation between the coastal State jurisdiction set out in art. 56 and the freedoms given to the other States of the EEZ in art. 58 more closely. Ultimately, I will examine the MPA under the provision in art. 59.

6.2 Norway's rights and jurisdiction in it's EEZ; art. 56

6.2.1 "Sovereign rights" in art. 56

The purpose of art. 56 is to indicate the general nature of the rights, jurisdiction and duties of the coastal State in the EEZ. Interesting for my investigation is the provision in paragraph 1(a) which lays "sovereign rights" on the coastal State

> "for the purpose of…, conserving and managing the natural resources, whether living or non-living".

The function of "sovereign rights" within the EEZ requires further examination. Both because it is an autonomous term under the Convention and because it is rather diffuse. An ordinary textual interpretation leads to the understanding of the use of "sovereign" to qualify the legal character of the specified "rights"; "sovereign" in this sense is used to describe the supremacy of the coastal States under the EEZ regime in regard to these rights. This supremacy is also reflected in the name on the zone: "exclusive economic", which draws attention to the fundamental economic nature of the zone.

[219] Advisory group (2003), p. 112.

In the 1958 Convention of the Continental shelf the term "sovereign rights" is also utilized.[220] The meaning in UNCLOS must be considered to be identical, even though the scope end function is more extensive in the EEZ.[221] In relation to the Continental shelf Convention draft art. 68[222] the International Law Commission explained the expression "sovereign rights". The ILC noted that it:

> "desired to avoid language lending itself to interpretations alien to an object which the Commission considered to be of decisive importance, namely, the safeguarding of the principle of the full freedom of the superjacent sea and air space above it. Hence it was unwilling to accept the sovereignty of the coastal State over the seabed and subsoil of the continental shelf. On the other hand, the text as now adopted leaves no doubt that the rights conferred upon the coastal State cover all rights for and connected with the exploration and exploitation of the natural resources of the continental shelf. Such rights include jurisdiction in connexion with the prevention and punishment of violation of the law."[223]

With the exclusion of the reference to "the full freedom of the superjacent sea",[224] the passage is applicable in respect of the function of the sovereign rights of the coastal State in the EEZ.[225] In respect to Norway's competence to establish MPAs to protect the natural resources, the statement from the International Law Commission may be used to argue that the right to conserve and manage natural resources includes the right to protect the natural resources with whatever means Norway deems necessary. Furthermore, it can be extracted from the statement that this right is principal to the rights bestowed the other States in the EEZ.

I have discussed the correlation of the term "biodiversity" and "natural resources" in chapter 5. There I concluded that an effective interpretation of the coastal States sovereign right to "conserve and manage…resources" can not generally include all biodiversity, only biodiversity which can be transformed into economic value falls

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[220] Convention on the Continental Shelf done at Geneva, on 29 April 1958. Entry into force 10 June 1964.

[221] Grandy, N. R., S. N. Nandan, et al. (1993)., para. 56.11a).

[222] Which became art. 2 in the 1958 Convention.

[223] Report of the International Law Commission covering work of its eight session (A/3159), art. 68. Commentary, para. (2), International Law Commission (1956), at 253, 297.

[224] which is modified with regard to the EEZ.

[225] International Law Commission (1956), Grandy, N. R., S. N. Nandan, et al. (1993)., para. 56.11a).

within the scope of the provision. However, I don't regard this limitation to have any great implication for my further discussion.

Even though the sovereign rights may provide a general basis for MPA, there is little reality of a MPA without appropriate restrictions. The interesting problem is which restrictions are permissible in accordance with the coastal State's rights? Do restrictions concerning activity which is not deemed as environmental hazards by the Convention have basis in the sovereign rights? What about the protection of marine biodiversity which is not commonly regarded to be a resource? These questions will be investigated in the following.

6.2.2 Environmental protective jurisdiction in accordance with art. 56 1(b)

With regard to coastal State environmental protective jurisdiction in the EEZ art. 56 1(b) states;

> "jurisdiction as provided for in the relevant provision in this Convention with regard to:
> (iii) the protection and preservation of the marine environment;"

The connected obligations to protect and preserve the marine environment are found in Part XII. Although the Convention does not explicitly call for creation of protected areas, it must be interpreted dynamically and in light of the recent developments,[226] to allow the utilization of protected areas as a measure to fulfill the obligations under Part XII. As concluded above the right to establish a MPA, must also follow of the "sovereign right" to exploit living natural resources.

In the EEZ an interesting problem as to the environmental jurisdiction of sedentary species arises. Art 68 specifies that Part V does not apply to sedentary species, read together with art. 77, it retains the rule that sedentary species fall under the regime of the continental shelf. What are the consequences of the exclusion for sedentary species? Should the sedentary species also be withdrawn from the coastal States environmental jurisdiction, the consequences could be serious, seeing that no environmental protection is foreseen in Part VI. This could also affect other biodiversity which falls within the

[226] CBD, OSPAR, World Heritage Convention (1972).

coastal State's jurisdiction, because sufficient protective measures often require a ecosystem approach. Interpretation is required to ascertain the scope of the exception.[227] The provision simply states "this Part does not apply". It leaves two possible interpretations of the scope.

The first interpretive result, based on a pure textual interpretation of the provision, is that all rights, jurisdiction and duties which arise from art. 56 must be disregarded in the case of sedentary species. The consequence of this could be that restrictions which had an objective of protecting sea-bed ecosystems as a whole within the EEZ may be without basis.

The other result is that only the sovereign rights in art. 56(1) a) are excluded. This interpretation gives the coastal State environmental jurisdiction to the shelf within the 200-mile zone. Several arguments can be presented to authorize this interpretation. Art. 56(1) b) gives the coastal State the environmental jurisdiction to preserve and protect the marine environment "as provided in the relevant provisions in this Convention." The wide formulation is based on a concord that the coastal State, because of it's proximity in the 200-mile zone, is best suitable to protect the marine environment. Moreover, environmental degradation would affect the coastal State worst, and therefore it should be able to design the necessary measures to protect the environment. From an ecosystem-approach perspective environmental protection which excludes one group of species has little value. These arguments viewed together validate the inclusion of sedentary species within environmental jurisdiction of the coastal State in the EEZ. A possible premise for this conclusion is that those restrictions which are directly and singly aimed at the sedentary species are excluded. Oppositely, in cases where the conservation objective is the protection of marine biodiversity they must, in my opinion, be included.

The above conclusion has effects also in a more general manner. In the further discussion a premise is that there is a difference with regard to the environmental jurisdiction of the coastal State on the continental shelf within and beyond the 200-mile zone. This difference is based on the broad environmental jurisdiction given by art.

[227] See section 7.3 regarding the coastal States lack of general environmental jurisdiction in Part VI.

56(1)b). Consequently, the standing of MPA and connected restrictions on the continental shelf will first be examined in this chapter, and beyond the EEZ in chapter 7.

I will now investigate the standing of the restrictions explored in chapter 2 in art. 56(1)(b).

First, I will examine the right to establish MPAs with restrictions aimed to protect marine biodiversity from pollution.[228] The protection of the marine environment against pollution was one of the main focuses for the negotiations regarding the environmental issues leading to UNCLOS.

The point of departure is art. 194(1), which elaborates further on the general obligation set out in art. 192 in regard to pollution. Art 194 sets the general ambient in regard to pollution in UNCLOS. The text does not provide for clear affirmation with regard to the establishment of MPA to prevent pollution. The broad obligation to utilize "all measures… that are necessary to prevent, reduce and control pollution of the marine environment from any source" is constrained by the requirement that the measures are "consistent with this Convention". This implies that the more specific provisions in Section 5 "International rules and national legislation to prevent, reduce and control pollution of the marine environment" are decisive with regard to the legitimacy of a measure under the Convention.[229]

Article 194 (5) requires a closer investigation.

> "The measures taken in accordance with this Part shall include those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species or other forms of marine life."

The provision does not specify which protective measures should be taken to meet the requirement; it does not exclude the use of protected areas. Art. 194(5) manifests an

[228] See section 2.3.

[229] Relevant are provisions in art. 210 and 211.

ecosystem approach,[230] and thus establishes a link to holistic biodiversity conservation. The measures to be taken are those necessary to protect. In the last decades scientific evidence suggests that marine protected areas[231] are "necessary to protect and preserve".

The coastal States prescriptive jurisdiction concerning pollution in the EEZ is stated in art. 211(5). In contrast to the jurisdictional scope enjoyed by the coastal State in the territorial sea, the coastal State's jurisdiction in the EEZ is limited to adopt laws "giving effect to generally accepted international rules and standards established through the competent international organization or general diplomatic conference". Consequently, the coastal State has little material jurisdiction over the measures chosen to protect against pollution. This lends support to the view that there is not opportunity for coastal States to restrictions within the MPA which pose greater limitations on other States than the "generally accepted international rules and standards…"

Dumping under the Convention is defined in art. 1(5). Art 210(5) contains a provision relevant to the question at hand. All forms of dumping within the coastal States jurisdictional zones "shall not be carried out without the express prior approval". The provision sets a qualification that approved dumping must not compromise other States which "may be adversely affected thereby." A second qualification must follow of the obligation in art. 192; however the content of this limitation is not clear. The coastal State is given the jurisdiction to prohibit dumping as it sees fit. This indicates that the coastal State in regard to dumping may establish no dumping zones without any restrictions by international law.

Next, I will investigate the establishment of MPAs with restrictions aimed at the protection of marine biodiversity directly. It is possible to divide restrictions in two: those that manage biodiversity, and those which protect the biodiversity's habitat.

UNCLOS requires States to conserve and manage marine living resources within areas under national jurisdiction. The coastal State may regulate seasons and areas for fishing, the types, size and amount of gear, and the types, size and number of fishing vessels

[230] Explained in section 1.3.2, p. 14.

[231] As defined in section 1.3.2.

that may be used, and fix the age and size of fish and other species that may be caught and take any other measure for conservation, including moratoria and closed seasons under art. 62(4). The objective of the conservation measures is to maintain or restore populations of harvested species at levels which can produce the maximum sustainable yield, and to maintain and restore populations of associated or dependant species.

Does art. 62(4) legitimize restrictions which do not have the immediate aim of maintaining or restoring populations? Would restrictions which are not directly coupled with utilization of resources be excluded? The answer to this question cannot be found directly in UNCLOS. It must be sought by an interpretation of Convention's system as a whole.

Argument that UNCLOS encourages the designation and the establishment of MPAs may be forwarded on the basis of art. 194(5) and the ecosystem approach. Such an interpretive result can be further supported by art. 192. The phrasing of art. 194(5) does not constrict the provision to pollution threats, this limitation follows of the heading of art. 194(5). This must entail that it only applies to one threat to the marine biodiversity; pollution. The question is it in accordance with UNCLOS to widen the scope of art. 914(5) to include other threats? Art. 1 (1) No.4 of UNCLOS already widens the classical term of "pollution of the marine environment" it explicitly includes harmful effects on marine life.[232] This view may be supported by the UN Secretary-General's annual report "Oceans and the law of the Sea":

> "The duties of States under UNCLOS to conserve and manage their natural resources, including, for example... the obligation of States under 194(5)… have been further strengthened by the requirement of parties under the Convention on Biological Diversity to establish marine protected areas within the zones of national jurisdiction…"[233]

In using the term "further strengthened" in this context, the Secretary-General suggests that there is a duty to establish MPAs within the zones of national jurisdiction.

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[232] Czybulka, D. (2001).

[233] Secretary-General (1999).para. 493.

The Convention gives priority to the utilization of marine resources rather than to their protection, preservation and conservation. Consequently, utilization of marine resources is only restricted to a certain extent. The resource-questions, namely fish, oil, gas and manganese nodules were instrumental to the Third United Nations Conference on the Law of the Sea. All states wanted their share in the riches of seas and oceans, and wanted to benefit from the exploitation of the deep-seabed.[234] Seen together with the lack of a general provision for establishing of protected areas, these circumstances entail that the Convention does not provide a clear and legal safe basis for MPAs, neither in zones where the coastal State exercises sovereignty, sovereign rights and jurisdiction.[235]

The third group of restrictions are aimed at the prevention of physical alteration to the marine environment. Other than the general obligation in art. 192, UNCLOS does not provide explicitly for the protection of the marine environment from such physical alteration. Therefore restriction within a MPA with the aim of protecting biodiversity from this threat must seek basis in provision which principally have other objectives.

The jurisdiction given by the provisions examined above must be preformed with due regard to the rights and duties of other States and be compatible with other provisions of UNCLOS, art. 56(2). The significance of this provision is that it balances the rights, jurisdiction and duties of the coastal State with the rights and duties of other States in the EEZ. The freedoms given to other States in the EEZ are given in art. 58; these coincide largely with the freedoms of the high sea art. 88. The consequence of the "due regard" obligation in relation to marine protected areas will be scrutinized below in section 6.4 below.

6.3 Other States rights within the EEZ; art. 58

6.3.1 Introduction

The determination that the EEZ is a zone sui generis, coupled with the universal agreement that with in the EEZ the coastal State possesses sovereign rights for specific

[234] Platzöder, R. (2001). p.138

[235] Secretary-General (1999).

purposes,[236] made it necessary to provide explicitly for the rights of other States in the zone. Art. 58 (1) and (2) reads:

> 1. In the exclusive economic zone, all States, whether coastal or land-locked, enjoy, subject to the relevant provisions of this Convention, the freedoms referred to in art. 87 of navigation and overflight and of the laying of submarine cables and pipelines, and other internationally lawful uses of the sea related to these freedoms, such as those associated with the operation of ships, aircraft and submarine cables and pipelines, and compatible with the other provisions of this Convention.
>
> 2. Articles 88 to 115 and other pertinent rules of international law apply to the exclusive economic zone in so far as they are not incompatible with this Part.

6.3.2 The freedom of navigation

The freedom of navigation in the EEZ is given by art. 58(1). In the EEZ all States enjoy: "the freedom referred to in art. 87 of navigation" and "other internationally lawful uses of the sea related to this freedom compatible with the other provisions of the Convention". The foremost difference between the freedoms on the high seas and in the EEZ, is that in the EEZ the freedoms are subject to measures relating to the sovereign rights of the coastal State, but the freedoms are not so on the high seas. The theme of unimpeded passage runs throughout the Convention, even though it takes different forms in the different zones established by the Convention. This right in the EEZ is, however, subject to limitations based on different provisions. The freedom of navigation in the EEZ is subject to limitations given by the Convention. These limitations provide Norway with the jurisdictional ability to apply restrictions within protected areas which impede navigation.

Other State's freedom of navigation is subject to the coastal State's jurisdiction relating to pollution and resource control, as far as this follows of the Convention. In both the exclusive economic zone and in waters above the continental shelf, vessels are subject to the obligation to "respect" safety zones around artificial island and installations, although structures may not be placed in "recognized sea lanes essential to international navigation"

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[236] 6.2.

The freedom of navigation must be preformed with "due regard" to other States exercising this freedom, and to the coastal State sovereign rights and jurisdiction. This limitation is directly coupled with the third groups of limitations, since "due regard" indicates a normative obligation to cooperate while exercising competitive activities or freedoms in the zone. These limitations will be discussed in 6.4 below.

6.3.3 The freedom of laying submarine cables and pipelines[237]

All States enjoy the freedom of laying submarine cables and pipelines in the EEZ. Art. 87(1) (c) "freedom to lay submarine cables and pipelines, subject to Part VI".[238] In the Commentary of 1956, the ILC explained that "the term 'submarine cables' applies not only to telegraph and telephone cables, but also to high-voltage cables"[239] [240] Similarly, "pipelines" refers to primarily to those carrying hydrocarbons, but is not limited to those.

The freedom of laying submarine cables and pipelines is subject to limitations. The general limitation governing all freedom of the seas in art. 87(2) stating that these freedoms must be exercised with "due regard for the interest of other states in their exercise of the freedom of the seas" This freedom is also subject to the limitations in art. 58(1) and (2). Another explicit limitation with regard to the continental shelf within and beyond the EEZ is contained in art. 79.

Art. 58(3) introduces a reservation on the generality of (1) by requiring that in the exercise of their rights and the performance of their duties, States "shall have due regard to the rights and duties of the coastal State and shall comply with the laws and regulations adopted by the coastal State." This applies insofar as laws and regulations, adopted in accordance with the provisions of the Convention and other rules of international law, "are not incompatible with this Part.". The coastal State cannot justify

[237] See further discussion in chapter 7.

[238] Part IV on "Continental shelf".

[239] International Law Commission (1956).

[240] Compare UNCLOS art. 113.

the adoption of laws and regulations that exceed its powers under Part V by invoking "other rules of international law."

6.4 The obligation of "due regard" in art. 56(2) and art. 58(3)

6.4.1 In general

The subject matter in this section is: when are marine protected areas established by the coastal State within the EEZ in accordance with international law? To answer this question it is necessary to conduct a comparative study of art. 56 and 58, which both bestow rights within the EEZ contain a "due regard" clause. In this section, I will compare the coastal State's right and obligation to protect marine biodiversity, with the other States rights under consideration of both Parties obligation to act with due regard.

As a general starting point, the use of the term "due regard" indicates that the State parties have agreed to exercise their rights under the Convention in a sufficient and reasonable way, in a degree appropriate to demands of the other States within the EEZ.[241] This obligation to act with "due regard" must be viewed to be a limitation of the State's rights within the EEZ.

At a theoretical level it is interesting to examine if the "due regard" clause contains the same obligation for the coastal State and the other States. If so, this could have implications when interpreting the obligation in a concrete application of the provisions. A difference could imply that one group of States must consider different sets of norms to act with "due regard", making the consideration of "due regard" more complex. The relevant provisions state:

> "In exercising its rights and performing its duties under this Convention in the exclusive economic zone, the coastal State shall have due regard to the rights and duties of other States and shall act in a manner compatible with the provisions of this Convention." (Art. 56(2))
>
> "In exercising their rights and performing their duties under this Convention in the exclusive economic zone, States shall have due regard to the rights and

[241] Black's law dictionary (1991).

> duties of the coastal State and shall comply with the laws and regulations adopted by the coastal State in accordance with the provisions of this Convention and other rules of international law in so far as they are not incompatible with this Part." (Art.. 58 (3))

Both provisions contain a two tiered obligation to act with "due regard". In common is the first criteria; namely to consider "the rights and duties of" each other. This is a reference that includes the scope of right and duties under the UNCLOS as a whole. The nature of "due regard" under this first criterion must be deemed to be alike for both the coastal State and other States.

The second criterion set out by the provisions differs. Art. 56(2) states that "shall act in a manner compatible with the provisions of this Convention", while art. 58(3) provides that other States "shall comply with the laws and regulations adopted by the coastal State in accordance with the provisions of this Convention and other rules of international law in so far as they are not compatible with this Part". Obviously, the criterion to the coastal State to act in a manner compatible with the Convention, and the duty for other States to comply with laws are compatible. The last criterion applicable to the other States requires further interpretation.

What "other rules of international law" are relevant under this provision? Several treaties provide "other rules" pertaining to the coastal States and their obligation and duty to conserve marine biodiversity.[242] Common for these international rules are that they explicitly state their subsidiary nature to the Law of the Sea Convention.[243] Their application is therefore limited in relation to UNCLOS by their own text.

Nevertheless the interesting question remains: do these "other rules" have any independent significance in regard to UNCLOS concerning the coastal State jurisdiction to establish MPAs? The ordinary textual interpretation of the article's phrasing suggests that so is intended. The provision can be understood to be a safety vent, for those cases when UNCLOS is supplemented by other international rules. Such supplements may come from later agreements under the auspices of organizations established by the

[242] See chapter 3.

[243] CBD art. 22.

Convention, or by the competent international organization. All conventions that have applicability in the zone must fall under the scope of "other rules of international law", since the article does not pose any qualification, except from non-incompatibility "with this Part". Consequently, rules established under the CBD and that regional rules could have decisive importance in a concrete case regarding other States rights within the EEZ. Another question is if the "rules" must be treaty based, or if for example environmental principles, like the precautionary or the intergenerational principle, can be used to constitute "rules".

When examining the relationship between the coastal State established MPA and the rights of other States, it is useful to examine this on a case-to-case basis. I will do this by studying the consideration of due regard in connection with the different restriction coastal States may apply within a MPA.[244] In the further analysis the point of departure will be the freedoms of the EEZ; these will be held up against Norway's rights with in the EEZ to protect the biodiversity. This done the premises for the practical and specific interpretation of "due regard" will be present.

6.4.2 Restrictions conflicting with the freedom of navigation

Here, I will analyze the coastal State restrictions in a MPA which inhibits the freedom of navigation. First, I will explore navigational restraints founded in pollution prevention. Thereafter, I will review navigational restriction directly coupled with species conservation. Lastly, I will explore it in connection with restrictions implemented to avoid physical alteration to the marine environment. The recurring question is whether the obligation of "due regard" can contribute to a wider or a more restricted application of the coastal State jurisdiction than before stipulated.[245]

With regard to dumping, UNCLOS gives the coastal State jurisdiction to prohibit all dumping within the EEZ. Since the action of "dumping" can be forbidden entirely within the EEZ, there is no need to set navigational restriction in order to protect marine

[244] See section 2.3.

[245] Explored in chapter 3.

biodiversity from the hazard posed by dumping. Consequently, in regard to dumping the discussion of "due regard" does not have any significance.

For pollution the situation is different. The coastal State jurisdiction is limited to

> "giving effect to generally accepted international rules and standards established through the competent international organization or diplomatic conference"(art. 211(5))

Consequently the coastal State cannot generally, as was the case with dumping, forbid all pollution within its EEZ. Even though MPAs are currently much in focus on the international arena, my investigation found little evidence for internationally binding norms placing a duty on States to establish MPA in order to avoid degradation of marine biodiversity by pollution. There are different opinions on what is in accordance with the pollution jurisdiction bestowed to coastal States.[246] The question here is if the coastal State has a right to restrict or ban vessel navigation in order to prevent pollution that harms marine biodiversity. Should the coastal State, under national pollution legislation, enact protected areas where vessels are banned because of pollution hazards and threats the question of "due regard" arises.

The coastal State may convincingly argue that art. 194 and art. 211 together give them jurisdiction to utilize the protected areas in the campaign against pollution. They may regard the MPA as "consistent" with the Convention and as "necessary to prevent, reduce and control pollution of the marine environment".[247] Here, I will presume that this is a valid argumentation, and therefore isolated lends legitimacy to a MPA within the EEZ where vessel navigation is banned, or closely restricted and monitored. This is in contrast to other States' right to freedom of navigation. These rights are contrary. The rule of "due regard" must therefore come into consideration.

First, I will investigate the banning of vessel traffic within a certain area. Commonly this would be sought done by creating mandatory shipping lanes. Art. 56(2) ascertains that the coastal State shall take "due regard" to the exercise of the freedom of

[246] Ot.prp. nr. 35 (2002-2003).

[247] See 3.2.

navigation. This does not indicate that the freedom must prevail over the coastal State pollution jurisdiction, only that when coastal State implements provisions, it must offer the freedom navigation the necessary regard.

Conversely, the other States claiming freedom of navigation must exercise this in "due regard" of the costal State's right to implement measures to prevent and reduce pollution, art. 58(3). The other States may argue that within the EEZ, supremacy is given to the economic aspects of the marine sphere. Increase of transportation costs is therefore not in line with the main objective of the Convention.

Moreover, the Conventional system gives the Flag State pollution jurisdiction which complements the coastal State jurisdiction.[248] The UNCLOS regime as whole provides for inclusive pollution jurisdiction. All States are bound by the general obligation in art. 192 to preserve and protect the environment. It is, therefore, not necessary for the coastal State to widen its jurisdiction, and it cannot be deemed to be within due regard to do so.

Generally, the coastal State may be deemed is nearer and more competent to determine the most appropriate measures to protect marine biodiversity from pollution within the EEZ, and that the other States in "due regard" to this should accept infringement of their freedom. Other States may argue that should such establishment of MPA be accepted, it would constitute an undesirable and un-negotiated alteration of the jurisdictional regime of UNCLOS. This practice should not be viewed as "lawful" under the Convention. Such a practice would constitute a breach of art. 300 concerning "Good faith and abuse of rights".[249] Because of such a widening of environmental jurisdiction could be considered a abuse of the given jurisdiction.

Finally, one must take into view the second criterion of "due regard", art. 58(3), which relates to "other rules of international law". In regard to protected areas the coastal State

[248] Art. 211(2).

[249] "State Parties shall fulfill in good faith the obligations assumed under this Convention and shall exercise the rights, jurisdiction and freedoms recognized in this Convention in a manner which would not constitute an abuse of right.".

may argue that the general ambient in international law is to consider protected areas as necessary and crucial measures in order to successfully preserve marine biodiversity from the hazards posed by pollution. This is supported by the CBD, and especially the Jakarta Mandate. Agenda 21 also provides support. Additional support can be found at a regional level in the OSPAR convention. It may be argued that the protective areas are in coherence with the general principle of precaution which is recognized to have fundamental importance in international environmental law.[250]

Consequently, it is feasible that other States under their obligation to exercise their "freedom" with "due regard", and seen in connection with the general obligation in art. 192 and with regard to the general trends in international environmental law and State practice are subject to the coastal State created MPA to protect marine biodiversity from pollution.

To the conclusion above I must make some qualifications. If the protected area is established in good faith, to protect marine biodiversity from pollution, these areas should prevail over the other States navigational rights. By supposing "good faith" I mean to exclude those protected areas which could be established in order to fulfill other aims than biodiversity conservation. The problem with such an approach is that the motives behind a MPA could be quite difficult to prove, and it therefore results in a practical technical difficult norm to exercise/uphold. Therefore, a "good-faith" approach to MPA has been criticized at the normative level, and does not today have widespread support in the international community.

Above, the focus has been on the exclusion of all vessel traffic in certain areas. It is also possible that a coastal State may wish to regulate navigation in a less drastic manner than total prohibition. As I have already established, the consideration of "due regard" results, in some circumstances, in that the others States must respect established areas. Of this, it follows logically that also less intrusive measures must be respected.[251] Could

[250] The Vienna Convention art. 38(c) recognizes "the general principles of international law" as a source of international law. The relevant question is, however, if the Precautionary Principle may be regarded as a "principle" under the Vienna Convention.

[251] Based on a more to less argumentation.

"due regard" imply that there is an obligation to utilize the least invasive restriction, to protect marine biodiversity? The coastal State may argue that the precautionary principle is against such a solution. An interesting question concerns restrictions established in buffer zones. The problem is the indirect value for the conservation purpose, the consideration of due regard may have a different outfall.

Now, I will investigate "due regard" in connection with restriction on navigation in order to protect species from overexploitation and unsustainable catch. The Norwegian proposal, as of yet, does not suggest such restriction within the protected areas. The value of such a MPA would lie in undisturbed habitat and environment, which again could contribute to the conservation of sustainable stocks and populations. In the EEZ the coastal State is given "sovereign rights for the purpose of…conserving and managing the natural resources".[252] Other States right to exploit natural resources within the zone is dependant upon coastal State decision. The coastal State must determine "allowable catch" of living resources in its EEZ.[253] It would be considered contrary to the Convention should the coastal State set the allowable catch to nil. [254] Regardless, it is within the coastal States discretion to decide the details of the management regime, and geographically defined areas fall within the jurisdictional competence. In accordance with art. 61(4) coastal States shall take into consideration when designing measures:

> "…the effects on species associated with or dependant upon harvested species with a view of maintaining or restoring populations of such associated or dependant species above levels at which their reproduction may become seriously threatened."

Does this mean that valid measures under art. 61 include those protecting the dependant species, or the ecosystem and biodiversity connected with a harvested species? Anyway the article gives the coastal State the right to implement measures to avoid that human activity endangers living resources "by over-exploitation". It should be regarded as lex specialis, and it does not come in conflict with the freedoms of the EEZ.

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[252] Art. 56(1) see section 6.2.

[253] Art. 61(1).

[254] See delimitations 1.4.1.

In art. 65(1) endows upon the coastal State the unrestricted right:

> "to prohibit, limit or regulate the exploitation of marine mammals more strictly than provided for in this part"

As in the case of art. 61 the provision gives the coastal State the right to regulate the exploitation of marine mammals. This also includes the establishment of protected areas where all catch is prohibited. One can easily imagine that other restrictions also are deemed necessary to sufficiently protect the marine mammals. One such restriction could be the banning of noisy ships or vessels carrying certain hazardous substances. In addition, it would be plausible that restrictions aimed at conserving connected species could hamper vessel navigation.

Should UNCLOS provide the coastal State with a right to enact such measures a possible conflict with the freedom of navigation is present, and an application of "due regard" is needed. The consideration shares many arguments with the evaluation of pollution connected restriction. However, it is possible that stronger arguments may be presented in favor of the coastal State. The first is that in contrast with pollution-regime, only the coastal State is given protection jurisdiction for the living resources, there is no complementary obligation on the other States to conserve these resources. As a consequence, should the evaluation be in favor of the freedom of navigation the protection of the biodiversity may be fragmentary and not satisfactory in view of the scientific evidence.

Also coastal State implemented restrictions which may impede the freedom of navigation are the restrictions aimed at preventing physical alteration of the marine environment, must be considered under "due regard". I do not regard it as very practical that navigational measures are implemented in order to protect marine biodiversity from the dangers posed by physical alteration. Other measures seem more suitable. It is, however, possible that under certain circumstances the threat of ship wreck and the following impacts on the marine environment is considered to be extremely detrimental. This could result in measures founded in the precautionary approach and leading to the

restriction of all or some[255] navigation within an area. In such cases it is necessary to consider the duty to act with "due regard". I consider the legal basis for these restrictions to be so unclear, that grounds for an evaluation are not present. Should such restrictions find basis in the Convention, the grounds for this would be so exceptional that these same arguments would, in my opinion, also be decisive in the weighing of the obligation of "due regard".

6.4.3 Restrictions conflicting with the freedom of pipelines

Here, I will analyze the coastal State restrictions in a MPA which inhibits the freedom of laying pipelines and submarine cables. Restrictions can be founded in an objective to prevent pollution prevention, directly coupled with species conservation and to avoid physical alteration to the marine environment. The returning question is: does the obligation of "due regard" contribute to a wider or a more restricted application of the coastal State jurisdiction than before stipulated.[256]

My point of departure is that the coastal State as a consequence of the sovereign rights, and in addition the given jurisdiction to protect and reserve the environment may establish MPA on the continental shelf, protecting biodiversity from pollution, overexploitation and habitat destruction. The exercise of this right may com in conflict with the freedom of laying pipelines and submarine cables.

As will be discussion here must be seen in connection with the discussion which will be undertaken in section 7.3 on the legal basis of the national MPA on the continental shelf, only issues which are special for the EEZ will be explored here.

The consideration of "due regard" must evaluate the general environmental protection given to the coastal State. Furthermore, it should take into account the importance of the sea-bottom in the marine ecosystems, which results in that the coastal State protection of the living resources overall in the EEZ cannot disregard the threats posed from this freedom. The possibility to taken into consideration the jurisdiction posed in art 56(1) b,

[255] E.g. maybe the coastal State prohibits the towing of ships.

[256] Previously explored in chapter 3.

constitutes the greatest difference in the coastal States possibility to impede the other States right to lay pipelines and submarine cables within and beyond the 200-mile EEZ.

6.4.4 Fully protected areas

UNCLOS does not give any support for establishment of fully protected areas where all human activity is banned. On the contrary the Convention is focused on the use of the oceans.[257] A coastal State establishment and enactment of such a MPA in the EEZ must be viewed to be without foundation in the Convention. Consequently a closer review of such MPA must fall within the scope of art. 59.

6.5 Art. 59; the rule of equity

Art. 59 addresses the issue of the basis for the resolution of conflicts which may arise from the application of art. 55, 56 and 58 between the coastal State and other States over the residual rights and jurisdiction in the EEZ, in the event that no specific allocation is made. It supplies the legal mechanism to be employed in resolving conflicts of that nature, namely "equity . . . taking into account the respective importance of the interests involved to the parties as well as to the international community as a whole." Art. 59 relates to conflicts over residual rights in cases where the Convention does not attribute the rights or jurisdiction in question to the coastal State or to other States; accordingly it is to be interpreted in light of the functional nature of the rights as allocated in the Convention. It provides the basis for the settlement of "conflicts" regarding the rights and jurisdiction of States in the EEZ – that is, "on the basis of equity and in the light of all the relevant circumstances." In that way, it serves as a guide for the diplomatic settlement of "conflicts" as much as for the judicial settlement of "disputes." It is not a directive to dispute settlement organs to resolve disputes ex aequo et bono, a matter regulated specifically by art. 293(2).[258]

Art. 59 is the only provision in the Convention in which there is a direct reference to "equity" in a normative text for the resolution of conflicts regarding the attribution of rights and jurisdiction in the EEZ. Equity is not an abstract concept, but is qualified by

[257] See the UNCLOS Preamble.

[258] Art. 293(2) provides for such a possibility if the parties agree.

the provision that a conflict resolved on the basis of equity should take into account "the respective importance of the interests involved to the parties as well as to the international community as a whole." Given the functional nature of the EEZ, where economic interests are the principal concern this formula would normally favor the coastal State. Where conflicts arise on issues not involving the exploration for and exploitation of resources, the formula would tend to favor the interests of other States of the international community as a whole.[259] Art. 59 thus makes clear that, in case of un-attributed rights, there is no favor of either the coastal State or other States: each case, as it arises, will have to be decided on its own merits on the basis of the criteria set out in art. 59.[260] Interesting in connection with art. 59 are coastal State conservation measures that do not have legal founding in the Convention. Such measures may e.g. be measures which are enacted under the compliance with the CBD, or the regional Berne Convention or OSPAR.

6.6 Conclusion

The coastal State environmental jurisdiction in the EEZ is not well adjusted to the marine protected area set to protect marine biodiversity in general. By applying the given jurisdiction to the fullest the coastal State may achieve the establishment of MPA which contain the most important conservation components. Nonetheless the basis is unclear, and there is a currently a need to clarify the coastal States jurisdiction within the EEZ.

[259] Grandy, N. R., S. N. Nandan, et al. (1993)., para. 59.6(b)

[260] Churchill, R. and A. V. Lowe (1999), p. 176.

7 Norwegian jurisdiction on the Continental Shelf beyond the EEZ

7.1 Introduction

The regime of the Continental Shelf given by UNCLOS is predominantly a restatement of the norms of the 1958 Convention on the Continental Shelf.[261] UNCLOS art. 76 defines the Continental shelf to comprise:

> "the sea-bed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measures where the outer edge of the continental margin does not extend up to that distance."

The regime of the continental shelf has focus on control of economic resources and is based upon adjadancy and the distance principle.[262] The purpose of the regime is principally the allocation of the natural resources on the continental shelf to the coastal State, and at the same time to provide other States with important rights on the continental shelf. The rights on the continental shelf only refer to activities on the shelf itself. In chapter 6 I have examined the continental shelf within the 200-mile EEZ. Activities related to the adjacent water masses are regulated by the regime of the high sea.

I will examine if, and to what degree the coastal State has jurisdiction to protect and conserve marine biodiversity on the continental shelf. The objective is to study the coastal State jurisdiction to establish MPAs. First, I will provide a brief overview of the rights and duties bestowed on the coastal States and other States, section 7.2. An overview is essential as a basis for the analysis which I will undertake in section 7.3.

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[261] Thus, preparatory documents and case law based on the 1958 Convention are relevant.

[262] ICJ Libya – Malta C. IS. case, para 33.

There, I address the problem concerning the basis for environmental jurisdiction, and investigate possible foundations for the establishment of MPAs.

7.2 Rights and duties on the continental shelf

The coastal State is given "sovereign rights for the purpose of exploring it and exploiting the natural resources" in art. 77 (1). The sovereign rights are exclusive. Should the coastal State abstain from exploring and exploiting the continental shelf, other States may not undertake these activities without the express approval of the coastal State, art.77 (2). For the understanding of the scope of the coastal State's sovereign rights, the term "natural resources" is crucial. It is defined in art. 77 (4):

> "The natural resources referred to in this Part consist of the mineral and other non-living resources of the seabed and subsoil together with living organisms belonging to sedentary species, that is to say, organisms which, at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil."

In relation to the living resources, the question of what is comprised in the category sedentary species becomes important, since sedentary species are under the coastal State's control, while non-sedentary species are governed by the freedom of the high seas. The definition does not consider ecosystem diversity;[263] this has consequences for the scope of coastal State jurisdiction. These consequences will be examined in section 7.3.

Other States are given the right to lay submarine cables and pipelines as provided for in art. 79. Additionally, they enjoy the other freedoms of the high seas. The two major restrictions of the coastal States rights are direct consequences of the other States rights. Art. 78 (1) holds that the sovereign rights do not affect the legal status of the super adjacent waters, and paragraph 2 states that the exercise of the rights must "not infringe or result in any unjustifiable interference with navigation and other rights and freedoms of other States as provided for in this Convention."

[263] See section 1.3.1

The rights outlined above are supplemented by an obligation in Part XII, art 208 "Pollution from sea-bed activities subject to national jurisdiction". Paragraph 1 regards the coastal States:

> "Coastal States shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment arising from or in connection with sea-bed activities subject to their jurisdiction and from artificial islands, installations and structures under their jurisdiction, pursuant to articles 60 and 80."

The provision imposes an obligation on the coastal State to protect the marine environment from pollution when it has jurisdiction over the activity. All activity which arises from the exploration and exploitation of the coastal States sovereign rights, like petroleum and gas exploitation, is covered by the coastal State's duty. Additionally, the coastal State may pose qualifications to activity when giving exploitation licenses for the natural resources on the continental shelf. The jurisdiction in this case entails that the coastal State, without regard to International Law may decide if pipelines can be laid, and where they may be laid.[264] Other States duties are given in art. 208(2) "All States shall take other measures as may be necessary to prevent reduce or control such pollution." Consequently, other States when exercising their freedom of laying pipelines must take those measures which are "necessary". Questions arise as to the content of "necessary", and which State is to define it. The answer must be sought in general considerations of which State is most apt to evaluate "necessary". As regards to the content it must reflect the negotiated resource allocation. These considerations will be discussed below.

7.3 The legal basis of the national MPA on the continental shelf

7.3.1 Introduction

Part VI does not provide for coastal State environmental jurisdiction. With regard to the natural resources of the continental shelf, no specific measures for protection and preservation are foreseen. Therefore, the coastal State is left without clear legal basis with regard to the protection of marine biodiversity and establishment of MPA on the continental shelf. The outset for my investigation is a search for sources which support

[264] Art 79(4)

the jurisdiction. Today, an interpretation which excludes coastal State environmental jurisdiction could be considered too stringent in comparison to other international treaties like the CBD and the various regional agreements on the protection of marine biodiversity.

7.3.2 The coastal State's right to establish a MPA on the continental shelf

The basis for coastal State environmental jurisdiction is by no means clarified in international law. There would be little reality in the sovereign rights should the coastal State not be able to regulate activity on the shelf on the basis of environmental considerations. The argument I will present here, rests on the rationale that the allocation of sovereign rights must include the right to protect the natural resources of the continental shelf as the coastal State deems necessary. The coastal State may argue that the scope of the sovereign rights is so extensive that it excludes all other States from extracting natural resources from the shelf. Consequently, the establishment of MPAs must be in accordance with the rights given to the coastal State.

An interpretation of the concept of "sovereign rights" as conducted above must take into consideration the reasons why the coastal State's were given "sovereign rights" and not sovereignty. The term "sovereignty" was deliberately avoided in 1958.[265] Brownlie contributes this to a fear that the term "…redolent of territorial sovereignty (which operates in three dimensions), would prejudice the status of the high seas of the waters over the shelf".[266] The ILC commentary to this provision, discusses further the concept of "sovereign rights".[267] I argued in chapter 6 that the consequence of the ILC statement is that the coastal State enjoys the right to regulate the continental shelf under consideration to environmental matters. Basis for this conclusion I found in the Commission's statement: "Such rights include jurisdiction…"[268] Within the subject matter of the sovereign rights the coastal State has parallel environmental jurisdiction.[269] In the EEZ environmental jurisdiction is given explicitly in art. 56(1) b.

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[265] Brownlie, I. (1998)..

[266] Ibid., p. 215.

[267] See p. 84.

[268] ibid

[269] Ruud, M., G. Ulfstein, et al. (1997), p. 118.

Consequently the coastal State's environmental jurisdiction has a clear basis, and is less limited by the connection to the sovereign rights.

As the sovereign rights permit the coastal State to leave the continental shelf unexploited without other States thereby gaining the right to exploit the resources, restrictions within a MPA which ban all explorative and exploitive human activity on the shelf must be permissible. What restrictions may the coastal State enact in accordance with the jurisdiction based on the sovereign rights?

Scientific evidence suggests that successful protection of marine biodiversity is dependant upon a holistic approach, and thus that whole ecosystems need protection.[270] On this basis the coastal State may argue for the necessity of setting restrictions which involve the water masses adjacent to the shelf. A legal basis for such argumentation may be found in ILC statement which allows jurisdiction "all right for and connected with" exploitation of the natural resources. The justification for this being that sufficient protection must include the medium in which the biodiversity exists. Similar argumentation may be used to validate restrictions within the MPA that encompass biodiversity the sedentary species are dependant upon, either as predators or as nutrition. Such restrictions may be claimed to be connected with the exploitation of the natural resources.

In cases where there are immediate conflicting rights, as other States exercising their freedoms, the general obligation to protect and preserve the marine environment should give sufficient support to the sovereign right that such a MPA can be consider to have basis in the Convention. Should the area in question currently or in foreseeable future by appropriate for other State's exercise for their high sea freedoms this conclusion must be modified. In my opinion, the above jurisdictional claims cannot, in such cases, be accepted without a more detailed examination of the relationship of these rights and the other States right to lay submarine cables and pipelines.

[270] See chapter 2.

7.3.3 Restrictions which impede the freedom of laying pipelines and cables

Art. 79(1) provides: "All States are entitled to lay submarine cables and pipelines on the continental shelf, in accordance with the provision in this article." The problem in the following is if this freedom is subject to limitations arising from the coastal State's right to protect its natural resources; can the coastal State impose restriction of the laying of pipelines and cables in consideration to the protection of the natural resources?

UNCLOS does not explicitly state that environmental protection should be considered under the application of art. 79. However, there are other articles in UNCLOS which provide for a general obligation to protect and preserve marine biodiversity, [271] and art. 208 for the prevention of pollution form sea-bed activities. These provisions create the legal setting when investigating restrictions, based on environmental objectives, on the laying of pipelines and cables on the continental shelf.

Article 79(2) gives the coastal State the right to take "reasonable measures" for the exploration and exploitation of its natural resources. Furthermore "reasonable measures" can be taken for the prevention, reduction and control of "pollution from such pipelines". These are the only considerations which may validate "reasonable measures".[272] "Reasonable measures" may not impede the laying or maintenance of cables or pipelines. In accordance with paragraph 3, the course of such pipelines is subject to the coastal State consent. This is consistent with paragraph 2, which allows a coastal State to take reasonable measures for the prevention, reduction and control of pollution from pipelines. First, I will examine what can be considered as reasonable measures. Thereafter, I will explore the implications of paragraph 3 in the context of MPAs.

The first consideration under art 79(2) poses the question: are restrictions on the laying of pipelines within a MPA a "reasonable measure" for the exploration and exploitation of its natural resources? In the discussion of the scope of sovereign rights above, I have argued for the need to use MPAs in order to sufficiently ensure the natural resources. The deliberation in art. 79(2) is somewhat different, the focus is not what is to be

[271] See UNCLOS Part XII section , examined in chapter 3.

[272] Fleischer, C.A. (1994), p. 107

considered as sufficient for the protection of the natural resources. Decisive is rather the consideration to the other States' right; the measure taken for the exploration and exploitation must be "reasonable". I interpret this criterion to entail that the measure must be proportional in consideration to the other States rights. The main objective of the regime is the allocation of economic resources. Therefore, the economic benefits and disadvantages must be decisive in the consideration of proportionality, and thus what is "reasonable". The protection of the marine environment is an important principle under the Convention, and cannot be disregarded. Nevertheless, for the consideration of the protection marine environment to become decisive, the value of the biodiversity sought protected must be somehow extraordinary. The result may be that those restrictions within the MPA, which have little connection to near exploitation of the natural resources, cannot be considered to be "reasonable". This is because the continental shelf has focus on the economic; and not environmental objectives.

Are restrictions on the laying of pipelines within a MPA a "reasonable measure" for the prevention, reduction and control of "pollution from such pipelines"? The pollution threats posed by pipelines are those which may arise from breaching or seeping. The restriction of pipelines within a MPA could be apt in areas where pollution potentially could have dramatic consequences for biodiversity; especially in areas with rich biodiversity, or where natural conditions are likely to facilitate pollution. Other measures could provide sufficient protection, like requirements to construction, maintenance and materials in the pipelines. The phrasing of art.79 (2) lends credence to that the norm must be "reasonable" both in regard to the right of the coastal State and in the other States right to lay pipelines. Therefore, other States may argue, that instead of restricting the laying of pipelines in an area, the coastal State must take other measures. Restrictions on the laying may not be "reasonable", when other measures could have the same result. Furthermore, they may not be proportional, for instance the costs connected to a different course may be higher, both short and long term, than requirements which allow the preferred course.

The evaluation of "reasonable measures" in regard to pollution must include the consideration of art. 208. The question is whether pipelines laid in accordance with the freedom in art. 79(1) falls within the scope of art. 208(1). If so, the coastal States

jurisdiction is apparent, and the consideration of "reasonable" would have a different content. The content would be different because under art. 208 the main purpose is the prevention of pollution, and following the protection of the marine environment, whereas the "reasonable" criterion in art.79(2) by its phrasing is focused on the economic proportionality. Art. 208(1) is given applicability to 1) sea-bed activities subject to their jurisdiction and 2) from artificial islands, installations and structures under their jurisdiction, pursuant to articles 60 and 80. The first group refers to activities which have basis in the sovereign rights of art. 77, the other group is those activities mentioned in art. 80; none of these comprise the activity in question. A textual interpretation of paragraph 1 seems to leave out the pipelines in question. Therefore, the coastal State regulation of pipelines must follow the "reasonable" norm set out in art 79(2) also in connection with pollution. The consideration of "reasonable" must consume the duty conferred on all stated in art. 208(2), in addition to the general obligations in articles 192 and 194.[273] It may be argued that if there are special qualities with the pipelines or with what they convey, the augmented risk of serious pollution must be a valid consideration under the evaluation of "reasonable measure" .My conclusion is that in some circumstances a restriction denying laying of pipelines within a MPA is valid.

The coastal State has the right to approve the "delineation of the course of the laying of such pipelines", art. 79(3). An interpretation of the phrasing can suggest that the coastal States consent only is required cases where the pipelines may cause pollution; see "such pipelines". This rests on an understanding that the use of the term "such" is a reference to the detailed provision of "reasonable measures" given in paragraph 2. The use of "such" may also be understood as a general reference to pipelines laid under the freedom stated in art. 79, in contrast to those laid in connection with the coastal State's sovereign rights. Should the latter interpretation be correct, this would entail that the course of all pipelines are subject to the coastal State's consent. Should such an interpretation be valid, the question arises in which cases the coastal State may deny their consent? Are they the same as in those instances when reasonable measures are allowed, art.79(2)? Or can consent be denied also on the basis of other considerations,

[273] Czybulka, D., Kersandt, P (2000)., p. 41.

for example the protection of marine biodiversity and its habitat? This question is difficult, and little guidance is found in the Convention.

An interesting problem in the interpretation of art 79(2) and (3) is that they do not refer to submarine cables. Submarine cables cause pollution by creating magnetic fields, by radiation and by noise. Such pollution is covered by the Convention, see the definition in art. 1 "energy". Can the restrictions found above related to the laying of pipelines, be given use on the laying of submarine cables? A textual interpretation of art 79(2) is against such application; the provision explicitly concerns pipelines. Nevertheless, several arguments are in favor of the inclusion of cables. The most important is that the there does not seem to be any authoritative reason for the divide. It seems illogical, and not in accordance with other UNCLOS pollution provisions that the source, and not the threat, of degradation of the marine resources is deciding for whether the coastal State has the right to take "reasonable measures" or not. This standpoint is further supported by that also submarine cables may pose pollution threats to the environment, and that these threats are covered by art. 208(2), which does not specify the source of pollution. These pollution hazards were perhaps not as evident at the time of the drafting as they are today. Nonetheless, a dynamic interpretation of the Convention should facilitate the inclusion of submarine cables in art 79(2).

7.3.4 The consideration of "due regard"

I have concluded that a right to establish MPAs follows from the sovereign rights which are bestowed in art 77(1). Regarding restrictions which impede the laying of pipelines and cables I have concluded that the provision in art. 79 only occasionally under special circumstances give the coastal State jurisdiction. The coastal State may argue for supremacy of their right to restrict the laying of pipelines and submarine cables by ways of "due regard". In other words, the core of their argumentation is that such restriction will be considered differently under "due regard" than under the evaluation of "reasonable measures". A number of provisions in Part VI attend the delicate problem of balancing the rights of the coastal States and the rights and freedoms of other States.[274] The only mention of a duty to act with "due regard" in Part VI is when laying

[274] Arts. 78(2), 79 and 81.

cables States must take “due regard” to already placed installations. This provision does not have direct relevance to the conflict which may occur in connection with the MPAs discussed above. Otherwise, no clear rule of due regard is set forth. A duty to act with “due regard” to other States rights is included both in Part V on the EEZ, and in Part VI on the High seas. Since there is no logic or good reason for the exclusion of “due regard” on the continental shelf, I will presume that a duty to act with “due regard” is similarly applicable on the continental shelf. The application of due regard must rest in a use of the provision in art. 87.

To evaluate if the result of a weighing of rights would be any different under “due regard” than under the decision of “reasonable” is difficult. Other objectives can come into consideration. Nevertheless, it is necessary to respect the explicitly given norm in art. 79(2). Perhaps, the most practical application of the criterion “due regard” is as an argument under the decision of “reasonable”. In my opinion, the inclusion of the duty to act with “due regard” results in a sounder basis for environmental objectives under the consideration of “reasonable measures.”

7.3.5 The application of the art. 59 rule of equity

Should the coastal State be unsuccessful in their claim of a right to establish a MPA with such restrictions, the question arises if they may argue that this is an un-attributed right, which must be solved by analogues application of the rule of “equity” set forth in art. 59. The methodology of international law does not readily support the analogous use of provisions. In instances where there is no provision to interpret, as is the case here, the main rule must be that no right can be established. Exceptions from this may have legitimacy in some cases where the other sources are clear to this end. Against such an application is the fact that no such rule is given in regard to the continental shelf. Therefore, a textual interpretation of the Part must result in the denial of such analogous use. Furthermore, this is supported be the unique nature of art. 59; it is the only provision in the Convention which opens for equity when the Convention itself does not offer an inclusive answer to disputes. Nonetheless, the need for such a rule on the continental shelf is apparent.

Should the rule of equity, in spite of the reservations made above, be applied on the establishment of MPA on the continental shelf, what result would be feasible? As concluded above, in relation to the EEZ, art. 59 makes it clear that, in case of un-attributed rights, there is no favor of either the coastal State or other States. Each case, as it arises, will have to be decided on its own merits on the basis of the criteria set out in art. 59. Seeing that the arguments under the consideration of equity on the continental shelf are much the same as in the EEZ, and that there are few sources regarding the application of art. 59, I will here only refer to the analysis done in relation to the application of the provision under the EEZ.

7.4 Conclusions

The question about the coastal State's right to establish a MPA for the protection of biodiversity on the continental Shelf is difficult. Even though jurisdiction to protect biodiversity can be inferred from the coastal State's sovereign rights, these are subject to restrictions. The restrictions represent conflicting rights in the same area, and the Convention does not give a clear basis for the resolution. No supremacy to environmental protection is given in Part VI. The general obligations in Part XII may be used to argue for the right to establish, but so not seem to offer much assistance in the conflict of rights. The localization of pipelines and submarine cables is the greatest conflict area. Some opening for the coastal State to direct the localization was found in art 79(3), but only for limited situations. Consequently, the coastal State does not have the right to determine the localization of pipelines and submarine cables in other situations.[275]

[275] Brownlie, I. (1998)., p.216. Fleischer, C.A. (1994), p. 107

8 Conclusions

I have had three main objectives with my study of the marine protected area established by the coastal State for the protection of marine biodiversity.

The first objective was to examine attributes of the marine protected area as a legal measure. There, I found that it is difficult crystallize one authoritative understanding the concept. Rather, my investigation led to a conclusion that there are many different definitions, objective and restriction possible within a MPA that it is difficult make general conclusion on the content.

The second objective was to clarify the standing of the MPA in international and national law. There the question whether there a duty to protect marine biodiversity by MPAs was explored both at the international and national level. At the international level, I found that the notion of MPA as an important measure for the protection of biodiversity has gained widespread acceptance in both scientific and in political circles. Nevertheless, this has not as of yet materialized in legally binding norms which place an express duty for the States to establish MPA. I also examined Norwegian legislation, and found that it in many ways was somewhat maladjusted to the specific issues of the marine sphere.

The third objective was to discuss the coastal States right to establish MPA to protect biodiversity under UNCLOS. Given that the coastal States environmental jurisdiction differs in the different zones defined under UNCLOS, my analysis followed this division. The exercise of discussing the coastal State's right to establish MPA was tricky, and throughout the examination the reality of the non-compatibleness of the environmental protection philosophy of UNCLOS and the later ecosystem-approach was apparent.

The exercise of studying the novel and multifaceted conservation measure marine protected areas under international law has proved quite challenging. The current international legal framework is not well adapted to the notion of protecting marine biodiversity as a whole in protected areas. Rather, my investigation has revealed that the legal framework does not readily allow such protective measures. This is because the ecosystem approach is not yet the functional basis for the environmental treaties; and international law still has the outdated focus on the protection certain species, or certain habitat or against certain threats.

Even though the MPA as a measure to protect marine biodiversity has gained widespread support on the scientific and political level, there is a delay on the normative side. A revision and clarification of existing legal framework is required to enable the States to fulfill their political obligations in regard to the protection of marine biodiversity by the establishment of marine protected areas.

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